

***Ventura County Fire Protection
District***



Ventura County Fire Department Shield 1

Figure 1

Date	Section Updated	Page Numbers Updated	Description of Update	Updated By
11/15/16	Unit overview	5	Fire update	Moomey
11/25/16	Dispatch	14	Addition of Oxnard fire	Moomey
11/25/16	Tech/websites	36,37	Pulse Point	Moomey
04/01/17	Volunteerism	69	Entire section	Moomey
04/02/2018	Unit description	4,5	Population/ Fire activity	Moomey
04/09/2018	Fuel beds	6,7,8,12	Fire activity/ Fuels	Moomey
05/02/2018	Collaboration	21,22	Contact update	Moomey
05/03/2018	Accomplishments	56-59,61,62	Accomplishments	Moomey
05/03/2018	Project activities	PDF Report attachment	Report	Moomey
05/04/2018	Cover page		New photo	Moomey
05/14/2018	Fire Hazard Reduction	41	Fee Rate	Moomey
04/04/2019	Executive summary	2,3,4	Strategic plan	Moomey
04/05/2019	Unit Description	6,7	Fires over 300 acres	Moomey
04/15/2019	Unit Preparedness	16	Santa Paula	Moomey
04/15/2019	Fuel Beds	9,10,11	Fire update	Moomey
04/16/2019	Unit Preparedness	21,22	Station Directory	Moomey
04/16/2019	Unit Preparedness	22	Map Update	Moomey
04/17/2019	Pre-Fire	36,37,38,39	Defensible Space	Moomey
04/20/2019	Pre-Fire	41,42	Vegetation Management	Moomey
04/22/2019	Pre-Fire	43	Fire Hazard Reduction	Moomey
04/23/2019	Pre-Fire Tactics	47	Vegetation Management	Moomey
04/25/2019	Pre-Fire	50	Pre-Fire Projects	Moomey
04/29/2019	Annual Reporting	60-65,68&69	Accomplishments	Moomey
05/01/2019	Table of Contents		Update page numbers	Moomey
03/18/2020	Air Unit		Helicopter capabilities	Lovo
04/15/2020	Unit Overview	7,10,13	Fire season 2019 update	Moomey
04/17/2020	Unit Preparedness	16,17,18,20,22,23	Battalions, Dispatch, plans	Moomey
04/28/2020	Collaboration	24,25,26	New Partners	Moomey
04/29/2020	Appendix A and D	50,51,56,57	Pre-Fire Projects, Map	Moomey
04/29/2020	Accomplishments	61,62,63,64-71	Annual	Moomey
04/01/21	Unit Preparedness	13,14,16	Capabilities, new photo	Matheson
04/05/21	Collaboration	20,21	update	Matheson
05/05/21	Wildland Fire Ignitions	28,29	new	Moomey/ Elwood
04/07/2021	FHRP	43	update	Williams
05/01/2021	Fire Safe Councils	55	update	Moomey
04/05/2021	Accomplishments	60-67	update	Moomey
11/17/2021	Pre-Fire	49	project removed	Moomey

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SIGNATURE PAGE

Unit Strategic Fire Plan developed for Ventura County Fire Protection District (VCFPD)

This Plan:


- Was collaboratively developed. Interested parties, as well as federal, state, city, and county agencies within the Unit have been consulted and are listed in the plan.
- Identifies and prioritizes pre-fire and post-fire management strategies and tactics designed to reduce the loss of values at risk within the Unit.
- Is intended for use as a planning and assessment tool only. It is the responsibility of those implementing the projects to ensure that all environmental compliance requirements are met and permitting processes are followed.

X


Dustin Gardner (Jun 14, 2022 11:20 PDT)

Dustin Gardner
Fire Chief

X

 06/14/2022

Celine Moomey
Pre-Fire Specialist

EXECUTIVE SUMMARY

Ventura County is one of six counties that maintains a contractual relationship with CAL FIRE. A Unit Plan that is part of the California Strategic Fire Plan is used within the Ventura County Fire Department.

The State of California's Strategic 2018 Fire Plan (State Plan) creates a statewide framework for collaboratively reducing and preventing the impacts of fire through suppression and prevention efforts. The State Plan's vision is for a natural environment that is more fire resilient, buildings and infrastructure that are more fire-resistant, and a society that is more aware of and responsive to the benefits and threats of wildland fire; all achieved through local, state, federal, tribal, and private partnerships.

The State Plan anticipates the trends in wildland fires will continue. The effects of climate change, prolonged drought, tree mortality, and development into the wildland urban interface will continue to increase the number and severity of wildland fires.

The focus is on (1) fire prevention and suppression activities and (2) natural resources management, and the continued inclusive collaboration among local, state, federal, tribal, and private partners.

The Ventura County Fire Department seeks to achieve these same goals locally with a Unit Fire Plan that works with stakeholders and cooperators to create programs, policies, and procedures that will make the residents of Ventura County safer. Another significant element of this plan is to identify and evaluate wildland fire hazards to minimize the negative effects of wildland fire on the natural and human-made environments.

The Healthy Forest Restoration Act (HFRA) enacted by the U.S. Congress on January 7, 2003, established a protocol for the creation of a document – a Community Wildfire Protection Plan (CWPP) – that articulates a wildfire safety plan for communities at risk from wildland fires. This document was created by following that protocol.

This Unit Fire Plan is designed to be a living document in order to adapt to changes in the environment and the needs of the various stakeholders whom it affects. The information provided in this Unit Fire Plan has been updated to reflect project plans, implementations, and accomplishments.

With a commitment to fire prevention through a collaborative approach to hazard reduction, public education, and vegetation management programs, the Ventura County Fire Department is working to empower communities to become more fire resilient. By carefully managing native vegetation, creating defensible space, hardening homes, and raising wildfire awareness, the Unit believes it is preventing fires from occurring and mitigating the ones that do occur. These efforts result in reduced fire suppression costs and property loss and keep both citizens and firefighters safer.

The goals that are critical to achieving the State Plan's vision revolve around fire prevention, natural resource management, and fire suppression efforts, as broadly construed. Major components are:

- Improve the availability and use of consistent, shared information on hazard and risk assessment.
- Promote the role of local planning processes, including general plans, new development, and existing developments, and recognize individual landowner/homeowner responsibilities.
- Foster a shared vision among communities and the multiple fire protection jurisdictions, including county-based plans and community-based plans such as Community Wildfire Protection Plans (CWPP).
- Increase awareness and actions to improve fire resistance of man-made assets at risk and fire resilience of wildland environments through natural resource management.
- Integrate implementation of fire and vegetative fuels management practices consistent with the priorities of landowners or managers.
- Determine and seek the needed level of resources for fire prevention, natural resource management, fire suppression, and related services.
- Implement needed assessments and actions for post-fire protection and recovery.

To support the State's Strategic Fire Plan, the Ventura County Fire Department's Unit Fire Plan will continue in their efforts to:

- Analyze fuel beds, topography, and fire history to identify both at-risk communities and the projects necessary to help protect them.
- Collaborate with local Fire Safe Councils and other community groups to seek sources of funding to support ongoing vegetation management and fire prevention projects as well as implementing new ones.
- Utilize CAL FIRE personnel and resources, in conjunction with other efforts, to assist with projects.
- Educate the public on wildfire preparedness, defensible space, fire hazard reduction, fire-resistant construction and landscaping, and situational awareness.
- Continue to implement current efforts, and where necessary, establish new programs and projects to meet the State's Plan goals and objectives.

With skilled firefighters, fuel modification projects, and engaged communities, the Ventura County Fire Department is well-positioned to protect the residents of Ventura County and their environment against catastrophic fire conditions.

SECTION I: UNIT OVERVIEW

UNIT DESCRIPTION

The County of Ventura is located on California's Pacific coast and is bordered by Los Angeles County to the east, Santa Barbara County to the west, and Kern County to the north. Ventura County has 42 miles of coastline and its elevation ranges from sea level to 8,831 feet at Mount Pinos in the Los Padres National Forest.

Ventura County was formed from a piece of Santa Barbara County on January 1, 1873, following state legislation that approved the split on March 22, 1872. The county seat is the city of Ventura (San Buenaventura) and the county has a population of 850,536. The Ventura County Fire Department is an all-risk department providing emergency services to the unincorporated areas of the county and seven of its ten incorporated cities.

Ventura County encompasses 1,198,720 acres (1,873 square miles) of which 353,370 acres (552 square miles) are State Responsibility Area (SRA).



The Santa Monica Mountains National Recreation Area, parts of the Los Padres National Forest, and the Channel Islands National Park located in Ventura County. The county is also home to Naval Base Ventura County at Point Mugu and Port Hueneme, as well as the deep-water Port of Hueneme. Ventura County has a Mediterranean climate. Average high temperatures are 65 - 75 degrees Fahrenheit year-round; average low temperatures are 45 - 60°F. Freezing temperatures are possible during the winter and highs of over 100°F may occur during the summer and early fall. Strong east winds (Santa Anas) are most prevalent during the late summer and early fall but can occur at any time during the year, thereby elevating fire danger. The relatively short rainy season is typically between December and April.

Major industries within the county include oil exploration and production, manufacturing, health care, agriculture (greenhouse and row crops, citrus, and avocado groves) ranching, tourism, television/film production, and technology.

Traditional fire season in Ventura County starts in May or June. Coastal areas are frequently cooler during these months due to a marine influence and coastal fog, but conditions inland can be much warmer and drier. As the summer progresses into early fall, the fuel beds have typically reached critical moisture levels, and the advent of east winds can produce catastrophic fire weather and seasonal drought.

Major Ventura County wildfires have been documented as far back as 1898. Some of these fires remain among the largest to ever occur in the state of California. The Matilija Fire in 1932 burned more than 220,000 acres. The Wheeler Fire in 1985 consumed over 118,000 acres and the Day Fire in 2006 destroyed almost 163,000 acres. The Thomas Fire started on December 4, 2017, north of Santa Paula and south of Saint Thomas Aquinas College. A second fire was ignited nearly 30 minutes later, approximately four miles to the north in Upper Ojai at the top of Koenigstein Road. The fires soon merged and grew rapidly. In all, the fire consumed 281,893 acres within Ventura and Santa Barbara Counties, and 1,156 structures were damaged or destroyed.

The Thomas Fire's rates of spread (up to one acre per second) are attributed to hurricane-force Santa Ana winds combined with record heat, relative humidity in the single digits; fuel moistures well below the critical level with a large dead-to-live component due to an extended drought cycle. Most of the chaparral burned in the fire is considered to have been stand-replacing; possibly taking decades to return to pre-fire conditions.

The 96,949-acre Woolsey Fire response had an added complexity due to a mass shooting that occurred in Thousand Oaks the day before the fire began. On November 7, 2018, the mass shooting took the lives of 13 people, including the perpetrator and a police officer.

While the community was reeling from this tragic incident, the Hill Fire started. The fire was reported at 2:03 p.m. on November 8; twenty-one minutes later, at 2:24 p.m., the Woolsey Fire was reported. The Hill Fire began in the Camarillo area at Hill Canyon, about one mile west of Thousand Oaks, and burned 4,531 acres. The Woolsey Fire started in Woolsey Canyon on the Santa Suzanna Field Lab property, burned 96,949 acres in Ventura and Los Angeles Counties, destroyed 1,643 structures, killed three people, and caused the evacuation of more than 295,000 people. Some of those evacuees having been directly affected by the mass shooting.

Strong Santa Ana winds, resulting in rapid rates of fire spread, pushed the fire in a southerly direction. The Ventura Freeway, between the San Fernando Valley and the Conejo Valley, was closed as the fire crossed it and burned into the rugged Santa Monica Mountains, into Los Angeles County and the City of Malibu. The fire crossed the Pacific Coast Highway, burning structures and vehicles on both sides. Due to access and egress issues, many people took refuge on the beach near the ocean. Due to extended drought conditions and strong winds, the fire consumed most of the native vegetation, which could take decades to return to pre-fire conditions.

In 2019, Ventura County experienced two large fires igniting within a day of each other and under the same Santa Ana wind event. The 1,806-acre Easy Fire began October 30, 2019, at approximately 6:00 a.m.; the point of ignition was near Easy Street and Madera Road at the

westerly end of Simi Valley. As the fire was pushed towards Moorpark, on October 30, over 1,000 homes were threatened, and 26,000 Ventura County residents were evacuated due to the fire. The Ronald Reagan Presidential Library was almost surrounded by the fire. Ventura County Fire Department's vegetation management goat grazing project was credited with changing the fire's intensity, enabling firefighters to safely defend the library. While the Easy Fire was actively burning, the 9412-acre Maria Fire started at the top of South Mountain, south of the city of Santa Paula on October 31; reported at 6:13 p.m. Influenced by 20 - 30 mph winds, the fire worked its way north towards Santa Paula in the Santa Clara River Valley, and south towards Somis. Evacuations were ordered for over 1,800 homes surrounding the fire area, affecting over 7,500 residents.

VENTURA COUNTY FUEL BEDS

There are ten identified fuel beds in Ventura County. Each is analyzed based on its topography, vegetation types, fire history, and assets at risk. The entire Casitas, Ojai, and Ventura Fuel Beds burned during the Thomas Fire. Most of the chaparral that burned in the Thomas Fire is considered to have been stand-replacing; possibly taking decades to return to pre-fire conditions.

CASITAS FUEL BED

The Casitas Fuel Bed is bordered on the south by the Pacific Ocean, on the north by Camino Cielo, on the east by Highway 33, and on the west by the Ventura/Santa Barbara County line. The dominant vegetation in the fuel bed consists of oak woodland, chaparral, coastal sage scrub, and grass.

Assets at risk include structures, oil fields, 911 emergency communication infrastructure, agricultural orchards, and rangeland. Homes, ranches, and orchards along Highway 150 pose the most significant risk in the fuel bed and are also the most difficult to protect through fuel modification because of their sporadic placement. The Lake Casitas watershed is a low risk, high-value community resource that needs consideration in the planning process. Oil production facilities dominate the interior canyons of the fuel bed south of Lake Casitas, east of Highway 33 and north of Highway 101.

This fuel bed has sustained eight fires of over 300 acres. The most recent being the 281,893-acre Thomas Fire in December 2017. There are 20.53 miles of fire roads and 1.73 miles of utility roads maintained in this fuel bed.

MALIBU FUEL BED

Potrero Road borders the Malibu Fuel Bed on the north. It is bordered on the south by the Pacific Coast Highway, on the east by the Ventura/Los Angeles County line, and on the west by Lewis Road. The Santa Monica Mountain Range is a feature of this fuel bed. The dominant vegetation in the fuel bed consists of oak woodland in the drainages and on the north slopes. Chaparral, coastal sage scrub, and grass are dominant throughout the fuel bed.

Assets at risk include structures located in narrow canyons with limited access. The fact that most of the structures at risk are scattered throughout the fuel bed makes large-scale vegetation management projects difficult. The 100-foot defensible space requirement ordered by the Department's Fire Hazard Reduction Program is a key component of structure protection.

This fuel bed has sustained 15 fires of over 300 acres. Most recently, this fuel bed was affected by the 2018 Woolsey Fire. There are 8.43 miles of ranch roads maintained in this fuel bed.

Wildland Pre-Fire Plans: Carlisle Canyon Pre-Fire Plan and Yerba Buena Pre-Fire Plan.

OJAI FUEL BED

The Ojai Fuel Bed is bordered on the south by Santa Paula/Ojai Road (Highway 150), on the north by the Los Padres National Forest boundary, on the east by Santa Paula Creek, and on the west by Highway 33. The dominant vegetation in the fuel bed consists of oak woodland, light to medium brush, coastal sage scrub, and grass. Due to many years of drought, this fuel bed has recently experienced significant oak tree mortality.

Assets at risk include structures, oil fields, agricultural orchards, and rangeland. Many of the at-risk structures are located along the front country and others are in narrow canyons with limited access. The 100-foot defensible space requirement ordered by the Department's Fire Hazard Reduction Program is a key component to structure protection in these areas. Orchards are mixed in with this development creating additional assets that are threatened in a wildfire.

This fuel bed has sustained eight fires of over 300 acres. The most recent being the 281,893-acre Thomas Fire in December 2017.

There are 7.07 miles of fire roads and 4.22 miles of utility roads maintained in this fuel bed.

Wildland Pre-Fire Plans: Upper Ojai Pre-Fire Plan, Ojai Front Country Pre-Fire Plan, and Matilija Canyon Pre-Fire Plan.

SIMI FUEL BED

The Simi Fuel Bed is bordered on the south by Highway 101, on the north by Simi Valley, on the east by the San Fernando Valley (Los Angeles County), and on the west by Highway 23 and Olsen Road. The dominant vegetation in the fuel bed consists of oak woodland, chaparral, coastal sage scrub, and grass. Recent fire activity has reduced the fuel load considerably in the Big Mountain Range north of the city of Simi Valley.

Assets at risk are primarily structures. Single and multi-family dwellings in the North Ranch and Oak Park areas are a specific concern due to their alignment with a Santa Ana (east) wind and heavy fuels. Most of the land management/ownership for the open space belongs to the Conejo Open Space Conservation Agency (COSCA), Rancho Simi Park and Recreation, and Mountains Recreation and Conservation Authority (MRCA).

This fuel bed has sustained 23 fires of over 300 acres, most recently the 2019 Easy Fire. There are 68 miles of fire roads and 30 miles of fuel breaks maintained in this fuel bed.

Wildland Pre-Fire Plans: Box Canyon/Lilac Lane Pre-Fire Plan, Kevington Pre-Fire Plan, Bell Canyon Pre-Fire Plan, and Townsite Pre-Fire Plan.

THOUSAND OAKS FUEL BED

The Thousand Oaks Fuel Bed is bordered on the south by Potrero Road, on the north by Highway 118, on the east by the Highway 23, and on the west by the Oxnard Plains. The dominant vegetation in the fuel bed consists of oak woodland, chaparral, coastal sage scrub, and grass.

Assets at risk are primarily structures. Thousand Oaks is an urban area that has interface issues along its perimeter. Thousand Oaks has a great deal of open space which separates developed areas with hazardous fuels and, in some cases, steep terrain. This, coupled with diurnal west winds and seasonal Santa Ana (east) winds, makes the area very vulnerable to the effects of wildland fire. Most of the land management/ownership responsibility for the open spaces belongs to the Conejo Open Space Conservation Agency (COSCA) and the Mountains Recreation Conservation Authority (MRCA).

This fuel bed has sustained 12 fires of over 300 acres, recently, the 2018 Hill and Woolsey Fires. There are 3.09 miles of fire roads, 8.95 miles of utility roads, and one mile of ranch roads maintained in this fuel bed.

Wildland Pre-Fire Plans: Wildwood Pre-Fire Plan and Ventu Park Pre-Fire Plan

FILLMORE FUEL BED

The Fillmore Fuel Bed is bordered on the south by Highway 126, on the north by the Los Padres National Forest, on the east by Hopper Canyon, and on the west by Santa Paula Canyon. The dominant vegetation in the fuel bed consists of grass intermixed with chaparral and coastal sage

scrub. Oak woodland can be found in the drainage bottoms and on the north-facing slopes. In addition, small stands of timber may be found at the upper elevations of the fuel bed in select drainages.

Assets at risk include structures, rangeland, agriculture, and oil production facilities. In addition, the Hopper Mountain Condor Refuge is in the northeast portion of the fuel bed. Condor nesting sites dot the landscape throughout the area each year. Close collaboration with the biologists there and training help to promote safe operations on the refuge. The city of Fillmore borders the interface to the south and is vulnerable to both northwest and northeast winds.

This fuel bed has sustained 14 fires of over 300 acres. There are 10.96 miles of ranch roads and 2.8 miles of utility roads maintained in this fuel bed.

OAK RIDGE FUEL BED

The Oak Ridge Fuel Bed is bordered on the south by the Simi Fuel Bed, on the north by the Santa Clara River, on the east by the Ventura/Los Angeles County line, and on the west by Highway 23. The fuel bed is dominated by sparse oak woodland, chaparral, coastal sage scrub, and grass.

Assets at risk are primarily structures along the southern border, agriculture along the north and western borders, and rangeland within the fuel bed interior. Recent urban development in the Simi Valley and Moorpark areas has increased the WUI threat within the fuel bed. The area is very vulnerable to wildland fire, especially during Santa Ana wind conditions.

This fuel bed has sustained 23 fires of over 300 acres. There are 69.06 miles of fire roads, 20.76 miles of utility roads, and four miles of ranch roads maintained in this fuel bed.

PIRU FUEL BED

The Piru Fuel Bed is bordered on the south by the Santa Clara River, on the north by Agua Blanca Creek, on the east by Del Valle and on the west by Hopper Canyon. The dominant vegetation in the fuel bed consists of grass intermixed with chaparral and coastal sage scrub. Oak woodland can be found in select drainage bottoms and on the north-facing slopes.

Assets at risk include structures, rangeland, agriculture, and oil production facilities. In addition, the Hopper Mountain Condor Refuge is in the northwest portion of the fuel bed. Condor nesting sites dot the landscape throughout the area each year. Close collaboration with the biologists there and training help to promote safe operations on the refuge.

This fuel bed has sustained 16 fires of over 300 acres. There are 32 miles of fire roads and 9 miles of ranch roads maintained in this fuel bed.

Wildland Pre-Fire Plans: Piru Pre-Fire Plan and 27 North Pre-Fire Plan

SOUTH MOUNTAIN FUEL BED

The South Mountain Fuel Bed is bordered on the south by Highway 118, on the north by Highway 126, on the east by Highway 23, and on the west by Highway 118. The dominant vegetation in the fuel bed consists of grass and coastal sage scrub.

Assets at risk include structures, rangeland, communication facilities, agriculture, and oil production facilities. Oil production facilities are in the area of South Mountain and have been a source of many of the larger fires analyzed in the historical data. The arrangement of the facilities and the brush clearance around them normally reduces the risk posed in a wildfire.

This fuel bed has sustained 16 fires of over 300 acres, most recently the 2019 Maria Fire. There are 8.43 miles of ranch roads maintained in this fuel bed.

Wildland Pre-Fire Plans: 27 South Pre-Fire Plan

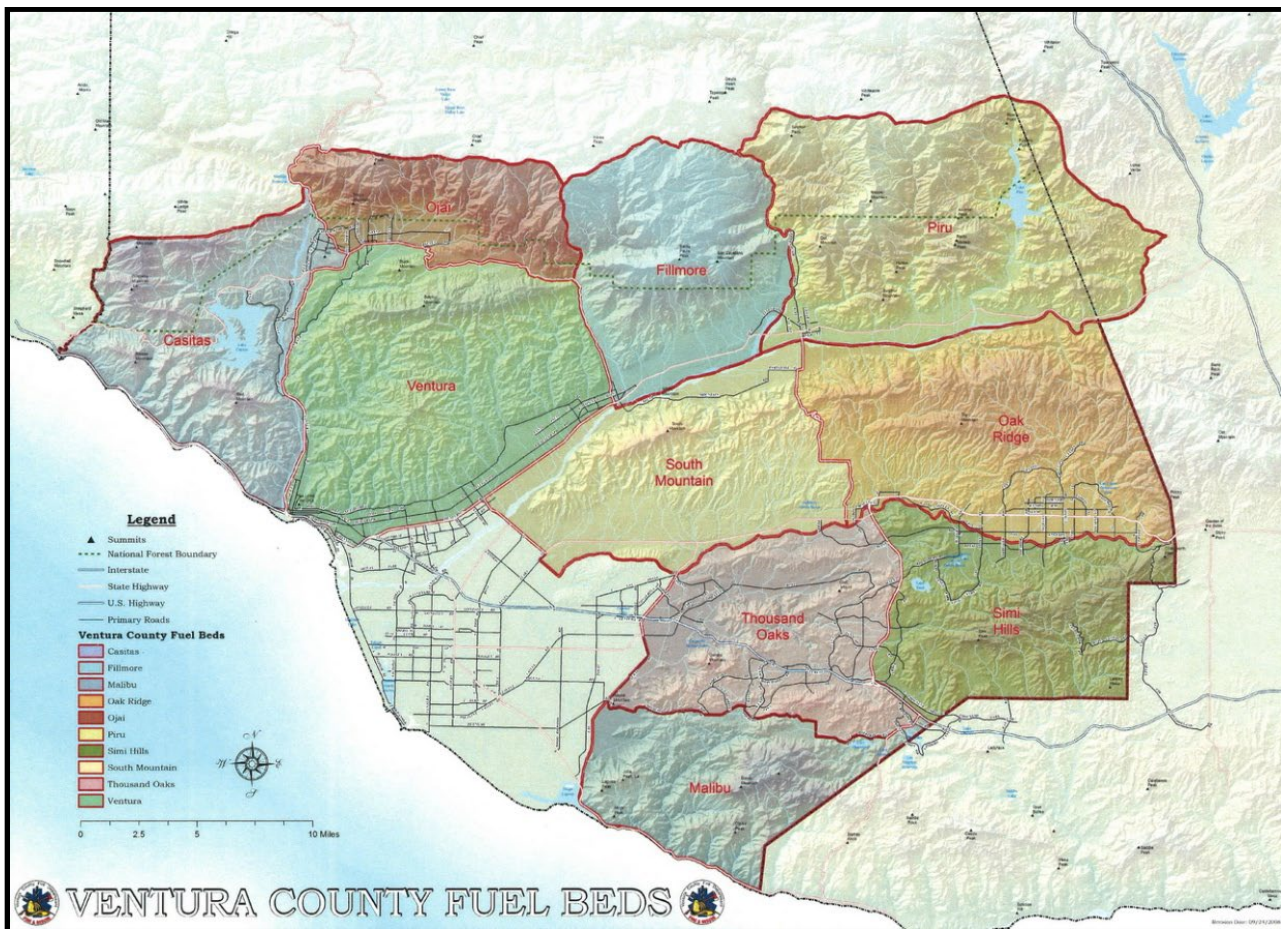
VENTURA FUEL BED

The Ventura Fuel Bed is bordered on the south by the City of Ventura, on the north by the Ojai Valley, on the east by Highway 150, and on the west by Highway 33. The dominant vegetation in the fuel bed consists of oak woodland, chaparral, coastal sage scrub, and grass. Recently, due to many years of drought, this fuel bed has experienced significant oak tree mortality.

The greatest area of risk in the Ventura Fuel Bed is in the interface area that separates the City of Ventura from the Ventura County jurisdictional areas. Development in the areas between Harmon, Sexton, and Barlow canyons would be challenging to protect in a wildfire driven by winds from the northeast. Additional at-risk areas include East Sulphur Mountain Road, Creek Road, and the east side of Highway 33. Agricultural assets and oil production are very prominent throughout this fuel bed. This fuel bed has sustained 16 fires of over 300 acres, the most recent being the 281,893-acre Thomas Fire in December 2017. There are 29 miles of fire roads, 12 miles of utility roads, and 21 miles of ranch roads maintained in this fuel bed.

Wildland Pre-Fire Plans: Wheeler Canyon Pre-Fire Plan

VENTURA COUNTY FUEL BEDS (MAP)



UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES



Ventura County Fire Department is an all-risk, full-service department, composed of 577 men and women. We proudly provide fire protection, medical aid, rescue, hazardous material response, fire prevention, and a variety of other services to the public. The Department's services are built around our mission of responding to the dynamic public safety needs of our diverse community.

The Department has 33 stations serving a population of more than 480,000 in seven cities – Thousand Oaks, Simi Valley, Moorpark, Camarillo, Port Hueneme, Santa Paula, Ojai, and the unincorporated areas of the County. The Department operates four Administration and Support facilities, 35 first-run fire engines, one first-run Quint, 16 reserve fire engines, 11 wildland fire engines, five ladder trucks (including two reserves), five water rescue and fireboat craft, three paramedic squads, 20 command vehicles, 12 pieces of heavy equipment (bulldozers, etc.) 3 type one helicopters, 3 type one hand crews, and 33 other emergency response vehicles. The Department responds to an average of 228 calls for service every day.

The Department is divided into five battalions and several specialized units.

Battalion 1 – Stations 50, 52, 54, 55, 56, and 57, primarily within the city of Camarillo and the surrounding area. Battalion 1 is home to the special operations units for Hazardous Materials, Crash/Rescue, Water Rescue, and Urban Search and Rescue.

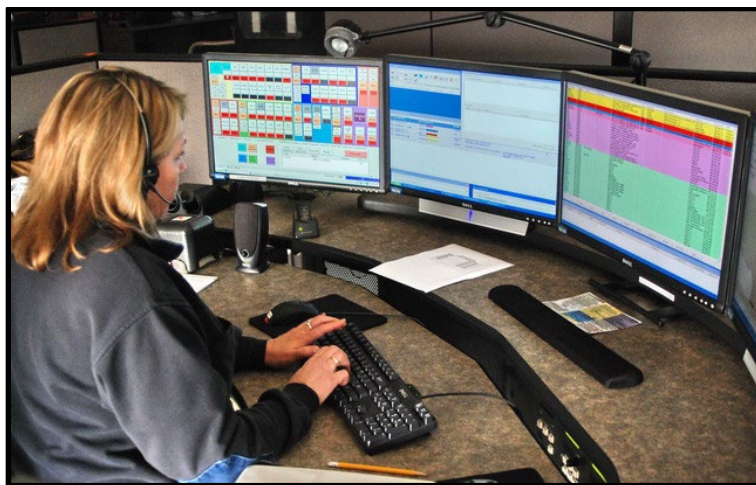
Battalion 2 – Stations 20, 21, 22, 23, and 25 covering the city of Ojai, unincorporated areas in the northern part of the county and District areas near the cities of Santa Paula and Ventura.

Battalion 3 – Stations 30, 31, 32, 33, 34, 35, 36, and 37 covering the city of Thousand Oaks and the greater Conejo Valley.

Battalion 4 – Stations 40, 41, 42, 43, 44, 45, 46, and 47, primarily within the cities of Moorpark and Simi Valley.

Battalion 5 – Stations 26, 27, 28, 29, 51, and 53, covering the city of Port Hueneme and District areas along the Santa Clara River valley and the Malibu coastline.

In addition to these on-duty stations, the Department has emergency response agreements with other fire agencies within Ventura County and immediately adjacent to it. This includes Los Angeles County Fire, Santa Barbara County Fire, Kern County Fire, CAL FIRE, the U.S. Forest Service, Federal Fire, and the cities of Los Angeles, Oxnard, Ventura, and Fillmore.



The Ventura County Regional Dispatch Center system handles fire and emergency medical calls for the five fire agencies in the County, including Ventura County, Oxnard, Ventura, Fillmore Fire Department, and the Federal Fire Department serving Naval Base Ventura County. Additionally, VCRD dispatches three ambulance providers, Gold Coast, Lifeline Medical Transport, and American Medical Response (AMR).

The Regional Training Center serves the training needs of not only the Ventura County Fire Department, but also much of Southern and Central California as well, offering numerous ICS courses, live-fire training, and other specialized instruction. All Ventura County Fire Department personnel are given initial training in accordance with all federal, state, and local laws and regulations for the position they hold. On-going training is provided to maintain all required certifications and to maintain appropriate proficiency in their position. The County highly encourages additional training and education to further enhance the capabilities of Fire Department personnel. This also includes wildland fire tactics and suppression classes. In addition, all County Disaster Service Workers (DSWs) are trained in accordance with the National Incident Management System (NIMS), the California Standardized Emergency Management System (SEMS), and the Incident Command System (ICS).

We partner with our community to identify risks and empower people with the tools to prepare and protect themselves. As part of that responsibility, we enforce codes and regulations, review more than 2,700 plans a year, inspect more than 6,800 homes and businesses a year, and issue roughly 110 fire code permits, and 360 film permits a year. We also work with more than 18,000 property owners each year to create defensible space through our Fire Hazard Reduction Program and conduct hundreds of public education events, including fire prevention and safety programs for children, adults, and seniors. In addition to the activities by the Fire Prevention Bureau, fire station personnel conduct over 350 fire safety inspections a year.

Specialized Units

Also available for response are specialized units with unique capabilities for incidents involving special hazards or needs. These units are not normally staffed. Personnel with the specialized training and qualifications will move from their regularly assigned units at the fire station and respond with these specialized units as needed.

Often, these specialized units will respond and operate in conjunction with similar units from other fire departments to form a regional response to incidents that present unique challenges. The Department's specialized units are Crash/Rescue, Hazardous Materials, Urban Search and Rescue, and Water Rescue.



Crash/Rescue - Crash 50 is based at the Camarillo Airport (Battalion 1) and responds to incidents involving flammable liquids (primarily aircraft crashes), oil field facility fires, flammable liquid storage, and transportation emergencies. Crash 50 has the capability of extinguishing flammable liquid fires and securing spills.



Hazardous Materials (HazMat) - The HazMat Unit is also based at the Camarillo Airport and responds to incidents involving chemical, biological, radiological, etiological hazards, or any other unknown substances. The team is state certified as a Type 1 Hazmat Team and qualified for regional responses. The HazMat Team will isolate a hazardous area, make entry, and identify and mitigate the hazard. They also perform decontamination of victims and emergency personnel. The Department's HazMat team is certified at a regional level and a state-of-the-art response vehicle was placed into service in 2012.

Urban Search & Rescue (USAR) - The USAR Unit is based out of Stations 54 (Battalion 1) and 40 (Battalion 4) and responds to technical rescue incidents. This team is also a State asset that responds as Regional Task Force 7. USAR incidents involve victims who are trapped due to earthquakes, building collapse, cave-in, trench collapse, major transportation crash, or other incidents where the entrapment exceeds the capabilities of the regular crews. The USAR team will stabilize the scene and make access to and extricate the victim. The Department received a grant for equipment that allows the USAR team to conduct rescues in so-called super-confined spaces such as tunnels and storm drains that require long-duration breathing apparatus.

Water Rescue - The Water Rescue Unit responds to water rescue incidents that exceed the capabilities of land-based units. It operates as a state asset under the designation of OES Team 10. The team is capable of in-water rescue and/or watercraft rescue. The team is trained in swift water, ocean, and lake rescues.

Wildland/Aviation - The Wildland Unit provides hand crew and bulldozer resources in the construction of fire control lines during wildfire suppression activities. When not engaged with fighting fire, the unit constructs and maintains fire breaks and fire roads, performs fuel management projects, and carries out other mitigation and prevention tasks. The Department also operates with the Ventura County Aviation Unit, which is a combined unit with the Ventura County Fire Protection District and Ventura County Sheriff Office. The unit provides public safety aviation services for fire and rescue incidents, including paramedic crew members and assistance with marijuana eradication. Ventura County's Aviation Unit has 8 helicopters available for fire department missions. Three Type 1 helicopters are hoist rescue, FLIR, firefighting capable via tank or collapsible bucket, with a 10-person fly crew capability. The four Type 2 helicopters are hoist capable, 8-person Fly crew-carrying, tank capability, and one Type 3 helicopter is available for mapping and FLIR missions.



Fire Suppression

The most effective time to control a wildfire is in the incipient stages when intensities are lower, and the perimeter is small. The combined resource attack is a coordinated suppression effort including ground assets (engines, crews, and dozers), aviation assets (fixed and rotary wing), passive fire protection measures, and command elements. Using in-place passive fire protection systems, incident commanders weave the various active fire suppression assets into an aggressive and coordinated firefighting effort.

Aggressive prevention and suppression policies can artificially age fuel beds to a point of uncontrollable volatility. Fuel beds are managed, where allowed, to reduce the age and expanses of volatile fuel and provide barriers between values at risk and large areas of hazardous fuel. Particular attention is given to those areas in fuel beds that are adjacent to the interface.

Assets susceptible to fire damage are identified in the Fire Plan as air quality, rangeland, agricultural land, recreational land, structures, water and watersheds, wildlife and habitat, and other resources (cultural, historic, and scenic). One of the methods which can be used in determining pre-fire projects is fire ignition data. Ignitions are plotted onto a map and the map is used to identify wildfire starts and potential areas of concern.



VENTURA COUNTY FIRE DEPARTMENT – STATION DIRECTORY

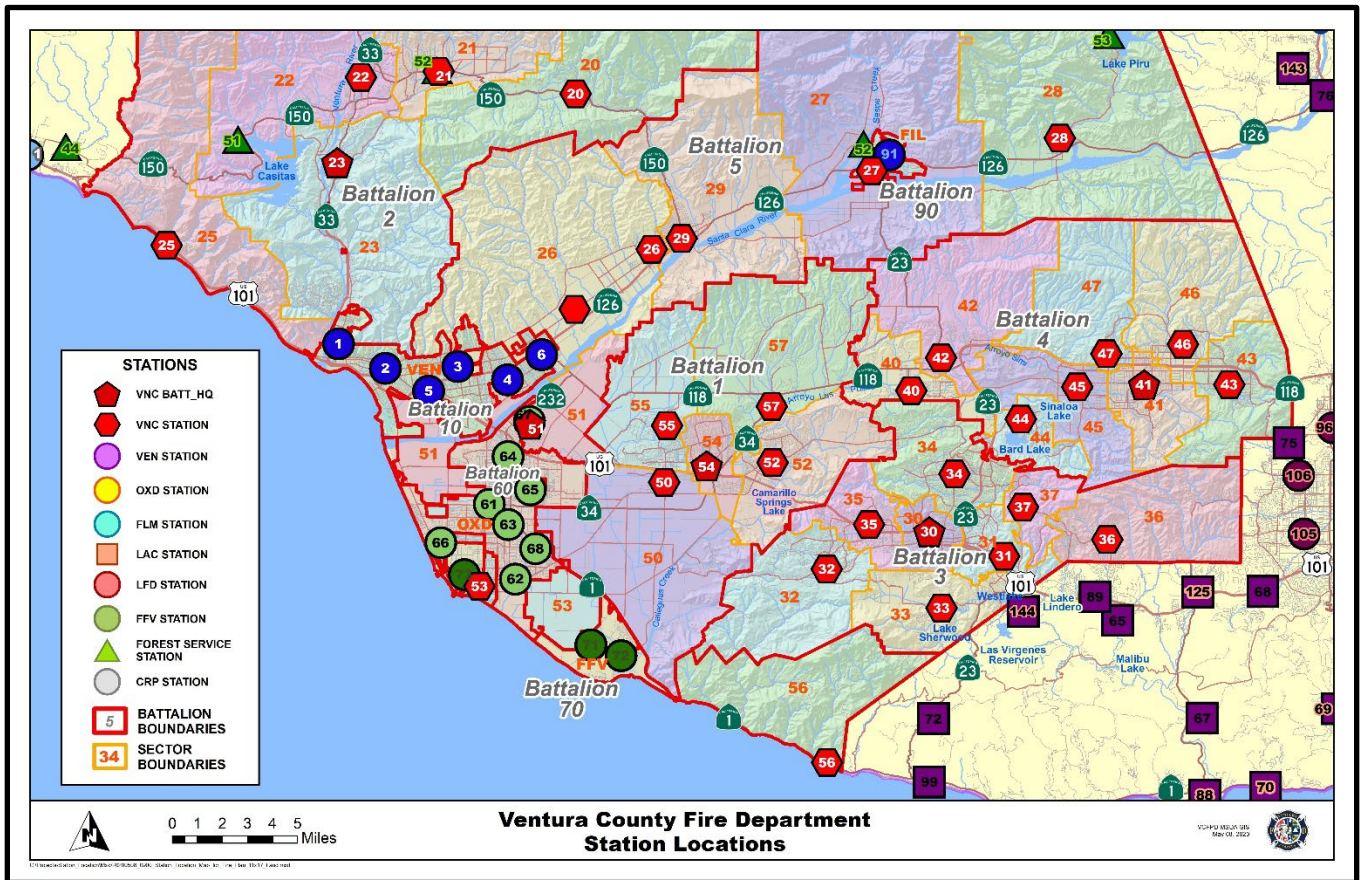
Location, Address and Phone Numbers

Communications..... 160 Durley Ave., Camarillo 93010, 805-388-4279
Community Education..... 102 Durley Ave., Camarillo 93010, 805-389-9748
Headquarters..... 165 Durley Ave., Camarillo 93010, 805-389-9710
Supply..... 2431 Latigo Ave., Oxnard 93030, 805-388-4536
Training..... 104 Durley Ave., Camarillo 93010, 805-389-9727
Vehicle Maintenance 2451 Latigo Ave., Oxnard 93030, 805-388-4500
Wildland Fire..... 2471 Latigo Ave., Oxnard 93030, 805-388-4584

Station Numbers, Station Names and Addresses:

20 Summit 12000 Santa Paula-Ojai Rd., Santa Paula 93060
21 Ojai 1201 E Ojai Ave., Ojai 93023
22 Meiners Oaks 466 S La Luna Ave., Ojai 93023
23 Oak View 15 Kunkle St., Oak View 93022
25 Rincon 5674 Pacific Coast Highway, Ventura 93001
26 West Santa Paula..... 563 W. Main Street, Santa Paula 93060
27 Fillmore..... 133 C Street, Fillmore 93015
28 Piru 513 N Church St. PO Box 317, Piru 93040
29 Santa Paula 114 S. 10th Street, Santa Paula 93063
30 Civic Center 325 W Hillcrest Dr. Thousand Oaks 91360
31 Westlake..... 151 Duesenberg Dr., Westlake Village 91362
32 Potrero..... 830 S Reino Rd., Newbury Park 91320
33 Lake Sherwood..... 33 Lake Sherwood Dr., Lake Sherwood 91361
34 Arboles 555 E. Avenida de Los Arboles, Thousand Oaks 91360
35 Newbury Park 751 Mitchell Rd, Newbury Park 91320
36 Oak Park 855 Deerhill Rd., Oak Park 91377
37 North Ranch 2010 Upper Ranch Rd., Westlake Village 91362
40 Mountain Meadows 4185 Cedar Springs St., Moorpark 93021
41 Church Street 1910 Church St., Simi Valley 93065
42 Moorpark 295 E High St., Moorpark 93021
43 Yosemite 5874 E Los Angeles Ave., Simi Valley 93063
44 Wood Ranch..... 1050 Country Club Dr., Simi Valley 93065
45 Pacific Street 790 Pacific Ave., Simi Valley 93065
46 Tapo Street..... 3265 Tapo St., Simi Valley 93063
47 Big Sky 2901 Erringer Rd., Simi Valley 93065
50 Camarillo Airport..... 189 S Las Posas Rd., Camarillo 93010
51 El Rio..... 3302 Turnout Park Cir., Oxnard 93036
52 Mission Oaks 5353 Santa Rosa Rd., Camarillo 93012
53 Port Hueneme 304 N 2nd St., Port Hueneme 93041
54 Camarillo 2160 Pickwick Dr., Camarillo 93010
55 La Posas 403 Valley Vista Dr., Camarillo 93010
56 Malibu 11855 Pacific Coast Hwy., Malibu 90265
57 Somis 3356 Somis Rd., PO Box 347, Somis 93066
..... Battalion 1 160 Pickwick Dr., Camarillo 93010, 383-6412

.....Battalion 2 215 Kunkle St., Oak View 93022, 649-6013
Battalion 3 325 W Hillcrest Dr., Thousand Oaks 91360, 371-0469
Battalion 4 910 Church St., Simi Valley 93065, 578-2053
Battalion 5 3302 Turnout Park Cir., Oxnard 93036, 278-2731



SECTION II: COLLABORATION

COMMUNITY/AGENCIES/FIRE SAFE COUNCILS

Representatives involved in the development of the Unit Strategic Fire Plan are included in the following table. Their organization and title are indicated below:

Organization	Title
CAL FIRE, Southern Region	Region Chief Dave Fulcher
CAL FIRE, SLO	Unit Chief Eddy Moore
California Department of Fish and Wildlife	Regional Manager Ed Pert
California Highway Patrol	Amanda L. Ray
Southern California Edison	Steven Powel
Fillmore Fire Department	Keith Gurrola, Fire Chief
Local Arborist	Mike Inaba
City Manager Camarillo	Greg Ramirez
City Manager Fillmore	David Rowlands
City Manager Moorpark	Troy Brown
City Manager Ojai	James Vega
City Manager Oxnard	Alexander Nguyen
City Manager Port Hueneme	Brad Connors
City Manager Santa Paula	Dan Singer
City Manager Simi Valley	Brian P. Gabler
City Manager Thousand Oaks	Andrew Powers
City Manager Ventura	Alex McIntyre
Local Ranchers	Rich Atmore
Ventura County RCD	Mark Mooring, President
National Park Service Santa Monica Mountains NRA	David Szymanski, Superintendent

Natural Resources Advisor, University of CA	Annemiek Schilder, Ventura County Director
Natural Resources Conservation Services	Terry Cosby
Public Information Officer, Thousand Oaks	Melissa Hurtado
Santa Monica Mountains NRA	Derrek Hartman, FMO
Ventura Land Trust	Mark Watkins
Ventura Resource Conservation District	Andy Spyrka
U.S. Fish & Wildlife Services, Southern California Fire Management Zone	Dale Shippelhouse, Zone FMO
USDA Forest Service, Ojai Ranger District	Mark Gerwe, Division Chief
Ventura City Fire Department	David Endaya, Fire Chief
Ventura City Fire Department	Brett Reed, Fire Marshall
Ventura County Agricultural Commissioner	Ed Williams
Ventura County Board of Supervisors	District 1 Supervisor, Matt LaVere
Ventura County Board of Supervisors	District 2 Supervisor, Linda Parks
Ventura County Board of Supervisors	District 3 Supervisor, Kelly Long
Ventura County Board of Supervisors	District 4 Supervisor, Bob Huber
Ventura County Board of Supervisors	District 5 Supervisor, Carmen Ramirez
Ventura County Farm Bureau	Ted Grether, President
Ventura County Fire Protection District	Ryan Matheson, Captain, Vegetation Management Program Manager

Ventura County Fire Protection District	Dustin Gardner, Fire Chief
Ventura County Fire Protection District	Massoud Araghi, Fire Marshall
Ventura County Fire Protection District	Larry Williams, FPO FHRP Unit Manager
Ventura County Fire Protection District	PR Director Scott Thomsen
Ventura County Sheriff	Bill Ayub
Ventura County Sheriff OES	Patrick Maynard
Ventura County Watershed Protection District	Glenn Shepard, Director
Ventura Regional Fire Safe Council	Mike La Plant, President
Ojai Valley Fire Safe Council	Will Castagna, President
Ventura River Watershed Council	Lynn Rodriguez
Ojai Valley Land Conservancy	Tom Maloney, Director
U.S. Fish & Wildlife Services, Southern California Fire	Tom Cline, BC
Ventura County Interim CEO	DR. Sevet Johnson
Ventu Park Fire Safe Council	John Allday, President
Bell Canyon Fire Safe Council	Greg McHugh, President
Oak Park Fire Safe Council	Doug Wilson
Santa Monica Resource Conservation District	R.C. Brody, President
Canejo Open Space Conservation District	Brian Stark
Conejo Recreation and Park District	Jim Friedl
Rancho Simi Recreation and Park District	Dan Paranick

SECTION III: VALUES

VALUES

The California Strategic Fire Plan defines valued assets susceptible to fire damage as air quality, rangelands, recreation, agriculture, structures, timber, water and watersheds, wildlife and habitat, and other resources (cultural, historic, and scenic). All these concerns exist in Ventura County. As a result, the Department has prioritized valued assets to maximize mitigation and prevention efforts.

Within the Ventura County Unit, there are approximately 846,000 people, 286,000 housing units, and 13,700 businesses at risk. Many of the housing units and businesses are within the Wildland Urban Interface; almost all lie inside the Ember Zone. The Ember Zone is any area within one mile of natural vegetation. These structures are priority assets.



Also given priority is the county's agricultural resources. There are approximately 125,000 acres of farmland and nearly 200,000 acres of grazing land. The crops and livestock grown by the county's farmers, ranchers, and growers have an annual value of \$2.1 billion. The farms and ranches employ thousands of people and their supporting industries – packing houses, trucking companies, and others – employ thousands more. Protecting the county's agricultural assets is a key goal of the Ventura County Fire Department. Additionally, the Department provides protection to the economically important oil and gas production industry, and there are historic and cultural resources to protect, including the Sespe Condor Sanctuary.

Ventura County is divided into six separate watersheds – Ventura River, Santa Clara River, Calleguas Creek, Malibu Creek, Cuyama River, and Coastal Creeks. These critical watersheds and their surrounding valley areas are prime candidates and receive priority consideration for vegetation management and fuel break projects. These projects benefit the watersheds by reducing fire hazards, removing invasive species, improving water yield, and enhancing wildlife and fisheries habitats. In addition, rapid post-fire assessment with project implementation as necessary is conducted in order to restore and protect areas of recovery, minimize flooding, protect water quality, and maintain native species seed banks.

COMMUNITIES

The northern half of the county lies within the Los Padres National Forest, concentrating the population mostly in the southern part of the county. The Los Padres National Forest accounts for 860 square miles of the northern portion of the county, comprising 46% of the county's land area. Clustered within the southern portion of the county are 14 communities at Risk.

- Camarillo (Battalion 1 – partially in the Thousand Oaks Fuel Bed)
- Casa Conejo (Battalion 3 – Thousand Oaks Fuel Bed)
- Fillmore (Battalion 5 – Fillmore Fuel Bed)
- Meiners Oaks (Battalion 2 – Casitas Fuel Bed)
- Mira Monte (Battalion 2 – Casitas Fuel Bed)
- Moorpark (Battalion 4 – Thousand Oaks Fuel Bed)
- Oak Park (Battalion 3 – Simi Fuel Bed)
- Oak View (Battalion 2 – Casitas Fuel Bed)
- Ojai (Battalion 2 – Ojai Fuel Bed)
- Piru (Battalion 5 – Piru Fuel Bed)
- Santa Paula (Battalion 5 – Ventura Fuel Bed)
- Simi Valley (Battalion 4 – Oak Ridge Fuel Bed)
- Thousand Oaks (Battalion 3 – Thousand Oaks Fuel Bed)
- Ventura (Battalions 2 and 5 – Casitas and Ventura Fuel Beds)

INFRASTRUCTURE AND AGRICULTURE AT RISK



Ventura County offers some unique challenges when dealing with values at risk. The county is home to a booming agricultural industry, including many different types of orchards that require protection. These orchards are intermixed and often pose a challenge when protecting the various trees and nearby agricultural infrastructure. Ventura County Fire Protection District

takes an aggressive stance in protecting these valuable assets through pre-planning and direct involvement with the local ranchers.

The wellbeing of the agricultural community in Ventura County is considered a priority. To help protect orchards and crops from freezing, VCFD and the Ventura County Air Pollution District partnered to allow the interim use of small warming fires (consisting of orchard clippings/materials) for the sole purpose of raising the temperature within the orchard or crop to prevent losses attributed to freezing and frost. The approval is subject to restrictions and limitations.



Critical infrastructure always poses a challenge to firefighters. Ventura County has numerous distribution systems that range from natural gas pipelines to major electrical transmission lines. Another challenge is the number of oil and natural gas production-distribution systems. These installations have a significant exposure to wildfire.

SECTION IV: PRE-FIRE MANAGEMENT STRATEGIES

FIRE PREVENTION

Fire plays an important role in the natural ecosystems within Ventura County. The goal of the Ventura County Fire Department Strategic Fire Plan is to prevent human-caused wildfires and to minimize the risk to lives, property, and infrastructure during the wildfire events that inevitably do occur.

The Ventura County Unit focuses on its fire prevention goal by addressing the risk factors which include:

Areas with limited or inadequate infrastructure to accommodate access for fire protection equipment or safe evacuation of residents during a wildfire event. In accordance with AB 2911

(2019), the Ventura County Fire Department will assist the California Board of Forestry and Fire Protection in surveying the County and preparing a list identifying all existing subdivisions over 30 dwellings located in a state responsibility area or a very high fire hazard severity zone, identified pursuant to Section 51178 of the Government Code, without a secondary egress route and that is at significant fire risk. The County will assist the California Board of Forestry and Fire Protection and with the California State Fire Marshall to develop recommendations to improve fire safety in the identified subdivisions.

Residential landscapes with dry and/or highly flammable vegetation located close to structures, and inadequate or non-existent defensible space.

Many older homes constructed with flammable building materials (particularly roofs) and inadequate vent coverings that will allow penetration of embers and flame.

Population with limited education and knowledge regarding fire-safe behaviors and practices.

Communities at risk that have expanded (homes, infrastructure, and assets) to the edges of large areas of old-growth chaparral.

The fire department will be implementing a parcel Home Ignition Zone (HIZ) program in the fall of 2022. This program will help property owners recognize areas of their home and property where they can make improvements and change in order to reduce their risk against wildfire.

This plan recommends the following strategies to mitigate these risks:

Continue existing vegetation management efforts and initiate new projects as appropriate to reduce risks in the WUI and ember-landing areas within and around the communities at risk.

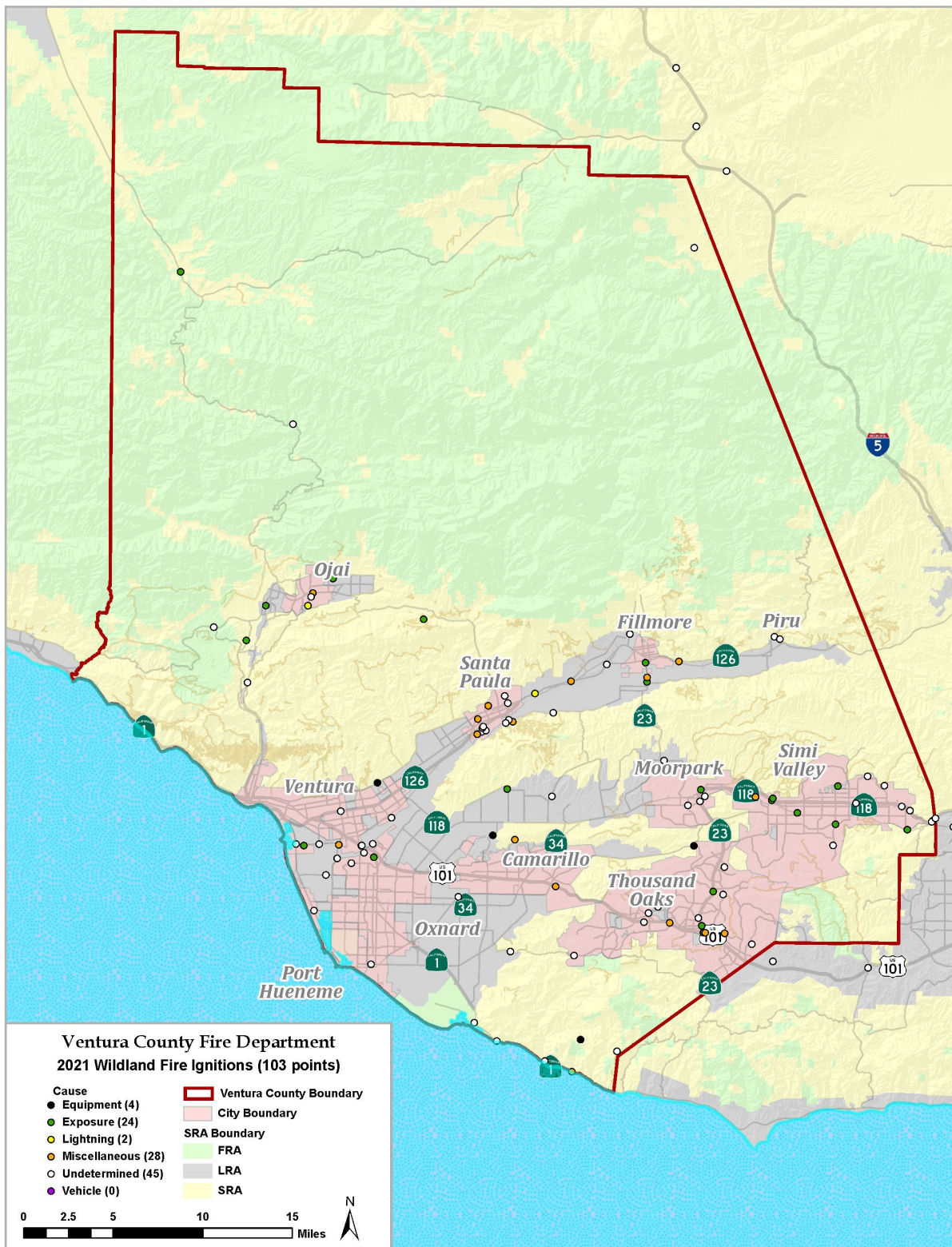
Promote fire-resistant landscaping and construction. Effective October 2021, the fire department now reviews landscape plans for new buildings in the fire hazard severity zones.

Conduct mechanical fuel treatments.

Develop and enforce building construction standards and local fire codes.

Compose pre-fire safety and escape plans.

Continue development and implementation of focused community meetings, programs, and wildfire safety education efforts directed at structure and property owners in the WUI areas.



2021 Wildland Fire Ignitions Map 1

Wildland Fire Ignition

Understanding the root cause of wildland fires and the county's fire history is a critical first step in understanding what necessary policies and actions can help mitigate this threat. Wildland fires are linked by two elements: ignition source which starts the fire and the fuel that feeds the fire allowing the fire to propagate.

On the ignitions data map, the placement of most ignitions along the roadways indicates that roadside causes represent a large portion of reported fires. There is an active program in the county administered by Cal-Trans and the Ventura County Public Works to mow along major highways and roads in order to prevent escalation of the ignitions along these corridors. As result of these actions, most fires are extinguished prior to moving from a small smoldering fire to an actively burning fire. In 2018 Ventura County Fire Department collaborated with Cal-Trans to treat a section of HWY118 with an innovative gel-based fire retardant that resulted in decreased roadside ignitions.

ENGINEERING AND STRUCTURE IGNITABILITY

Causes of Structural Ignition

Structures in or near a wildfire event can ignite for several reasons, including direct exposure to flame, radiant heat, and impact from falling trees that are burning.



However, the most significant cause of structural ignition, by both direct and indirect effect, is embers. In the high winds that frequently accompany wildfires in Ventura County, embers can be carried for up to two miles in advance of the flame front. These embers can ignite grass, brush, landscaping, and firewood piles, and can accumulate on wooden decks or under eaves. Without proper screening, they can also penetrate the attic and ignite homes long after the firefight seems to be over. The Unit makes a significant public information effort specifically targeting the dangers of ember intrusion.

Creating Ignition-Resistant Structures

A multi-faceted approach is recommended to effectively protect structures from ignition during a wildfire event. A combination of defensible space, fire-resistant materials, and fire-resistant structural design can greatly increase the odds of survival in a wildfire event.

Recommendations to improve structure survivability in a wildfire are:

- **Roofing materials**

The roofing materials must be resistant to the heat from embers – a Class A-rated roof, self-extinguishing, if possible (this means that a burning ember will not burn through the roofing material and ignite the wooden roof deck below it.) This is a key element of structural defense, without which the structure's risk increases dramatically.



- **Structural extensions and openings**

Awnings, decks and deck coverings, patio covers, porches, eaves, and open exterior stairways can provide a place where embers accumulate and ignite the extended structure, which can then ignite the main structure. Also, improperly screened attic or crawlspace vents or soffits can allow embers to enter and ignite the structure. Chimneys, open windows, or single-pane windows that break easily when stressed by the heat of a wildfire can also allow embers to enter.



- **Defensible space around the structure**

Defensible space, when properly done, eliminates many of the causes of structural ignition. Essentially, it is the trimming and/or removal of potential sources of fuel for fire near the structure, including flammable landscaping, firewood, propane tanks, trees or overhanging limbs, wooden fences, and trellises or other easily ignitable wood structures or objects. It should be understood, that “bare ground” landscaping is not the objective here -- rather, the landscape is carefully addressed to trim or remove “ladder fuels” that can carry fire from one shrub or tree to the next, and trees or shrubs that present direct risks due to their proximity to structures are trimmed or removed (with appropriate permits, if required).



- **Firefighting equipment access to the structure**

Roads, bridges, and driveways leading to a structure must be adequate in width, overhead clearance, and structural strength to accommodate firefighting equipment. Education is an important aspect of creating ignition-resistant homes and structures within the communities at risk. An outreach program to homeowners is recommended, as well as educational and reference materials for contractors, builders, and architects.

INFORMATION AND EDUCATION

Wildfires are now a year-round reality in Ventura County. This means that both fire management personnel and residents always must be prepared for the threat of brush fires. Firefighters train hard and make countless preparations to be ready for wildfire suppression. Fire managers work year-round to mitigate fire hazards. Residents need to do the same. Successfully preparing for a wildfire requires homeowners to take personal responsibility for protecting themselves, their families, and their property.

The Ventura County Fire Department takes every precaution to help protect homeowners and their property from a wildfire. But the reality is, during a major wildfire, there will simply not be enough fire engines or firefighters to defend every home, especially during the first hours of a major wildfire, so home and property owners must become part of the solution.

If a home borders or is located within a natural area - what firefighters call the Wildland Urban Interface or Intermix, then it is directly at risk from a wildfire. And, if the home is within one mile of a natural area, it is in the Ember Zone. Homes in the Ember Zone are at risk from wind-driven embers from a wildfire. Recent fires have resulted in entire neighborhoods being destroyed by fires started by embers, not the fire front itself.



Through the Ventura County Unit's **“Ready, Set, Go!”** program, a component of the Fire-Adapted Community concept, homeowners and other property owners learn about the Ember Zone and how to retrofit their homes, agricultural property, railways, oils fields and other properties with features that protect it from embers. The program demonstrates the importance of having defensible space around a home and the preparations homeowners need to make so they can leave early, evacuating before the fire arrives.



Since agriculture is a key component in the economy of Ventura County, the Unit has also designed a “Ready Set Go!” program for the community of ranchers and growers. The crops grown and livestock raised by the county’s farmers and ranchers have an annual value of

almost \$2 billion. The farms and ranches employ thousands of people and the industries that support them – packing houses, trucking companies, and others – employ thousands more.

Protecting the county's agricultural assets is a key goal of the Ventura County Fire Department.

Wildfire is a major threat to agriculture in Ventura County. Most of our agricultural properties are located either immediately adjacent to natural vegetation or within a mile of it, an area referred to as the Ember Zone. These properties are all at risk from the flaming front of an advancing wildfire or the embers it produces.

Fire is, and always has been, a natural part of the Ventura County ecosystem. Wildfires - fueled by a build-up of dry vegetation and driven by hot, dry winds - are extremely dangerous and very challenging to control. Many residents have built their homes and landscaped their properties without fully understanding the impact a fire could have on them. "Ready, Set, Go!" helps them prepare their homes so they can leave early, confident that they've done everything possible to protect their homes. In Ventura County, it's not a question of if, but when, the next wildfire will occur. That's why the most important person protecting Ventura County life and property is not a firefighter, but a homeowner. With advance planning and preparation, a homeowner can dramatically increase their safety and the survivability of their property. Over 1000 fire departments across the country have now adopted the "Ready, Set, Go!" program.

Defensible space is the required space between a structure and the wildland area that, under normal conditions, creates enough buffer to slow or halt the spread of wildfire to a structure. It provides space for firefighters to work between a home and an advancing fire, and it protects the home from igniting due to direct flame or radiant heat. Defensible space is essential for structure survivability during wildfire conditions.

Defensible space can be broken down into 4 zones:

WILDLAND-URBAN INTERFACE (WUI) AREA. That geographical area where structures and other human development meet or intermingle with wildland or vegetative fuels.

VCFD Defensible Space/ FMZ zones defined:

Zone 0: Ember-Resistant Zone 0-5 feet from buildings, structures, decks, etc.

Zone 1: Lean, Clean and Green Zone that extends 30-feet from buildings, structures, decks, etc. or to your property line, whichever is closer. Zone 1 can extend to 50-feet for slopes exceeding 20% grade

Zone 2: Reduce Fuel Zone. This is the area from the outer edge of Zone 1 to 100 feet from structures.

Zone 3: This is considered a thinning zone and is any FMZ greater than 100 feet from structures.

REQUIREMENTS BY ZONE

Zone 0 Purpose and Location. Zone 0 reduces the likelihood of structure ignition by reducing the potential for direct ignition of the structure from flame contact, by embers that accumulate at the base of a wall, and/or indirect ignitions when embers ignite vegetation, vegetative debris or other combustible materials located close to the structure that result in either a radiant heat and/or a direct flame contact exposure to the structure.

Zone 0 is the horizontal area within the first five feet around the structure, any outbuildings, and attached decks, and stairs. Zone 0 is measured from the edge of a structure, attached decks, patio covers, balconies, and floor projections above grade. The zone also includes the area under attached decks and stair landings.

Requirements and Allowable Items. This should be a “lean” or no planting zone.

- a. Ground cover not exceeding 3-inches high.
- b. Non-woody small herbaceous or succulent plants not exceeding two (2) feet high. Plants shall be spaced a minimum of 2x the height from other plants.
- c. Plants shall have a minimum clearance of 2x the plant height below and adjacent to windows or other openings into the structure, including vents.
- d. All ground cover and plants shall be set back from structures and decks 1x the height of the plant or 12-inches, whichever is greater.
- e. Vines and climbing plants are not allowed on structures, including decks, patio / shade structures, and any fences within 5 feet of a building.
- f. No combustible landscape mulch or wood chips. Use clear soil, rocks, gravel, or concrete.
- g. No Trees. See Section 3.2.2a regarding tree canopy setback from structures.
- h. Firewood is prohibited in Zone 0.
- i. Vegetation is prohibited underneath any deck.
- j. Other fuels underneath decks may be limited and shall not cause an ignition due to embers.

- k. Vegetation on decks shall meet the requirements of this zone regardless of the distance to the structure.
- l. VCFD highly recommends no combustible fences and gates within five (5) feet of a structure or deck. The new State Zone 0 Regulations currently under development may prohibit these in 2023 and also may require removal for existing installations starting in 2024.

Note: As required by State Law, regulations for Zone 0 are under development by the State Board of Forestry and are scheduled to take effect January 1, 2023, for all new buildings and January 1, 2024, for all existing buildings. Any State regulation more restrictive than this standard will apply.

Zone 1 Purpose and Location. Zone 1 reduces the likelihood of fire burning directly to the structure. This is accomplished by modifying fuels and creating a discontinuity between planting groups that limits the pathways for fire to burn to the structure and reduces the potential for near-to-building ember generation and radiant heat exposures. An additional purpose of this zone is to provide a defensible area for fire personnel to stage and take direct action.

Zone 1 is the area within 5-30 feet of structures and decks with slopes not greater than 20 percent; 5-50 feet from buildings and decks when slopes are greater than 20 percent.

Requirements and Allowable Items. This is a minimal planting zone and very limited trees of a fire-resistive type and additional spacing.

- a. Trees shall be spaced to allow a minimum 10-feet of clearance next to a structure.
- b. Firewood shall be relocated outside Zone1 unless completely covered in a secured, fire-resistant enclosure or covered with a secured, fire-resistant material, and not exceeding 1000-cubic feet.
- c. See Table 3 - Fire Department FMZ Spacing.

Zone 3: This is considered a thinning zone and is any FMZ greater than 100 feet from structures.

REQUIREMENTS BY ZONE

Zone 0 Purpose and Location. Zone 0 reduces the likelihood of structure ignition by reducing the potential for direct ignition of the structure from flame contact, by embers that accumulate at the base of a wall, and/or indirect ignitions when embers ignite vegetation, vegetative debris or other combustible materials located close to the structure that result in either a radiant heat and/or a direct flame contact exposure to the structure.

Zone 0 is the horizontal area within the first five feet around the structure, any outbuildings, and attached decks, and stairs. Zone 0 is measured from the edge of a structure, attached decks, patio covers, balconies, and floor projections above grade. The zone also includes the area under attached decks and stair landings.

Requirements and Allowable Items. This should be a “lean” or no planting zone.

- a. Ground cover not exceeding 3-inches high.
- b. Non-woody small herbaceous or succulent plants not exceeding two (2) feet high. Plants shall be spaced a minimum of 2x the height from other plants.
- c. Plants shall have a minimum clearance of 2x the plant height below and adjacent to windows or other openings into the structure, including vents.
- d. All ground cover and plants shall be set back from structures and decks 1x the height of the plant or 12-inches, whichever is greater.
- e. Vines and climbing plants are not allowed on structures, including decks, patio / shade structures, and any fences within 5 feet of a building.
- f. No combustible landscape mulch or wood chips. Use clear soil, rocks, gravel, or concrete.
- g. No Trees. See Section 3.2.2a regarding tree canopy setback from structures.
- h. Firewood is prohibited in Zone 0.
- i. Vegetation is prohibited underneath any deck.
- j. Other fuels underneath decks may be limited and shall not cause an ignition due to embers.

- k. Vegetation on decks shall meet the requirements of this zone regardless of the distance to the structure.
- l. VCFD highly recommends no combustible fences and gates within five (5) feet of a structure or deck. The new State Zone 0 Regulations currently under development may prohibit these in 2023 and also may require removal for existing installations starting in 2024.

Note: As required by State Law, regulations for Zone 0 are under development by the State Board of Forestry and are scheduled to take effect January 1, 2023, for all new buildings and January 1, 2024, for all existing buildings. Any State regulation more restrictive than this standard will apply.

Zone 1 Purpose and Location. Zone 1 reduces the likelihood of fire burning directly to the structure. This is accomplished by modifying fuels and creating a discontinuity between planting groups that limits the pathways for fire to burn to the structure and reduces the potential for near-to-building ember generation and radiant heat exposures. An additional purpose of this zone is to provide a defensible area for fire personnel to stage and take direct action.

Zone 1 is the area within 5-30 feet of structures and decks with slopes not greater than 20 percent; 5-50 feet from buildings and decks when slopes are greater than 20 percent.

Requirements and Allowable Items. This is a minimal planting zone and very limited trees of a fire-resistive type and additional spacing.

- a. Trees shall be spaced to allow a minimum 10-feet of clearance next to a structure.
- b. Firewood shall be relocated outside Zone1 unless completely covered in a secured, fire-resistant enclosure or covered with a secured, fire-resistant material, and not exceeding1000-cubic feet.
- c. See Table 3 - Fire Department FMZ Spacing.

ground cover or shrub. The horizontal clearance shall be 3-feet from the trunk of the tree.

- d. Slopes greater than 20%, For grouping of ground cover and shrubs over 6-inches high, the maximum horizontal distance running with the slope shall not exceed 10-feet before spacing is required to the next grouping.
- e. Use Zone 1 Tree Spacing for trees located between and or overlapping Zone 1 and 2.
- f. Spacing of vegetation and trees at the outer edge of Zone 2 shall be based upon the height of the vegetation within Zone 2 or the adjacent area beyond the 100-foot zone, which ever provides for the greater spacing. This may require clearance outside the 100-foot zone or setting back vegetation and trees within Zone 2 away from the 100-foot line.

Additional Requirements all Zones.

Prohibited and Invasive Plants. Plants and trees listed in Fire Department Guideline 410 – Prohibited Plant List or identified as “*Target” (undesirable) plants and trees in Fire Department Guideline 417 – Plant Reference Guide shall not be planted within any zone. No new invasive plants shall be installed, and it is highly recommended that any existing invasive plants be removed.

Grasses. Natural or annual grasses shall be mowed to a maximum height of 3-inch stubble with clippings removed.

Chimney Clearance. The horizontal and vertical clearance to any chimney outlet or heat-producing device shall not be less than 10-feet.

Ground Clearance of Trees. Trees exceeding 6-feet in height shall be limbed up from the ground 6-feet or 1/3 the height of the tree, whichever is less. Exception: Fruit trees when approved.

Maintenance. All plants and trees, including dried palm fronds, shall be maintained free of dead and dying wood, leaves, and limbs that can increase ability to ignite and/or carry fire.

Tree Litter. Tree litter shall not exceed 2-inches in depth underneath tree canopies.

Roof Clearance. The vertical clearance distance above any roof shall not be less than 3-feet.

Roofs and Gutters. Roofs and gutters on buildings shall be maintained free of any leaves, needles, or other vegetative materials.

Mulch and Wood Chips. Mulch and wood chips shall comply with Fire Department Standard 517 and are not allowed within 5-feet of structures.

Firewood. All exposed firewood and lumber piles must have a minimum of 10-feet of clearance, down to bare mineral soil in all directions and shall not exceed 1000 cubic feet.

Continuous Tree Canopies.

New Structures. Continuous tree canopies are not allowed. Tree spacing shall be in accordance with Table 3 of this standard.

Existing Structures Prior to April 19, 2019. Continuous tree canopies may be allowed as determined by the Fire Code Official but will require the complete removal of any understory and smaller trees to meet requirements for a shaded fuel zone. Any remaining trees shall be limbed up a minimum 12 feet from the ground or 1/3 the tree height, whichever is less. The intent is to not allow a crown (canopy) fire to spread unchecked to a structure and to bring any crown fire down to the ground level prior to Zone 1.

Other Agency Permits. Any permits required from other regulatory agencies shall be obtained prior to installation and work within the FMZ.

General Requirements for Entire Parcel.

Vertical Clearance. Provide a minimum 13-foot 6-inch vertical clearance above all roads, driveways, turnouts, and turnarounds providing fire department access to buildings.

Hydrants. Provide a minimum 3-foot clearance around all fire hydrants and fire department water supply outlets.

Spark Arrestor. Provide an approved spark arrestor or screen on all chimney outlets.

Electrical Line Clearance. The vertical clearance from vegetation and trees underneath overhead electrical facilities shall in accordance with the Ventura County Fire Code. No new vegetation shall be planted under or adjacent to energized power lines that, at maturity, will grow within 10-feet (3 048 mm) of the energized conductors.

Special Requirements. See Ventura County Fire Code for special clearance requirements regarding detached accessory buildings, prefabricated sea cargo/metal storage containers, LPG tanks, hazardous material storage, fire protection equipment and utilities.

Existing FMZ and Defensible Space Installations:

There is no “grandfathering” or exemptions for existing defensible space zones. When required by the Fire Department or State Law, existing defensible space/FMZs shall require retrofitting, including thinning and or removal of plants, trees, and vegetation, to meet this standard and or State Law. Also see note listed in Section 3.1.2 for Zone 0. When new buildings or additions to existing building are constructed on the parcel with existing buildings, the full 100-foot FMZ (or to property line if less than 100-feet) shall be brought into full compliance with this standard prior to final approval of the building construction.

Upon notification by the Fire Department, work to bring an existing defensible space and FMZ into compliance with this standard may be done over a four-year period. First year, an initial 30-feet from structure(s), then an additional 25-feet for each subsequent year.

Informational Websites and Documents

Ventura County Fire Department

<http://vcfd.org/>

www.vcfhrp.org

https://vcfd.org/images/FHRP/VCFD_Wildfire_Property_Assessment_Brochure_web-1.pdf

Social Media:



<https://www.facebook.com/venturacountyfire/>

<https://www.facebook.com/Ventura-County-CERT-155332581160589/>



<https://twitter.com/VCFD>



<https://www.linkedin.com/company/vcfd>



<https://www.instagram.com/venturacountyfire/>



<https://www.youtube.com/channel/UCVsskUmN7TUq-IFsSnOAXcg>



<https://vimeo.com/venturacountyfire>

Pulse Point

<http://vcfd.org/about-vcfd/pulsepoint-information>

Ready Set Go!

<http://firenet/Ready%20Set%20Go%20Documents/Ready,%20Set,%20Go!%20-%20Wildfire%20Action%20Plan.pdf>

Firewise Communities

<http://www.firewise.org/wildfire-preparedness.aspx>

Ventura County Fire Safe Councils:

Ventura Regional Fire Safe Council <https://venturafiresafe.org/>

Ojai Valley Fire Safe Council <https://firesafeojai.org/>

Bell Canyon Fire Safe Council <https://www.bellcanyon.com/bcfsc>

Ventu Park Fire Safe Council <https://www.vpfs.org/>

Oak Park Fire Safe Council – new in 2022 website coming!

Sustainable Defensible Space.org

Agricultural Burn Permit Information

<http://www.vcapcd.org/AgrBurQA.htm>

New Web Applications

Ventura County Fire and EMS agencies have joined together with Pulse Point to help increase survival rates of cardiac victims. Pulse Point is also an excellent way to receive alerts on brush fires within the county. The Pulse Point App is now available to Ventura County; the smartphone app is free and alerts everyday citizens when CPR is needed for patients in cardiac arrest. Get the app and help save a life. Download the Pulse Point app <http://vcfd.org/about-vcfd/pulsepoint-information> onto your Android or iPhone, and then follow “Ventura County Regional Dispatch” to receive real-time alerts.

VEGETATION MANAGEMENT

The Ventura County Fire Department believes in a vegetation management process that starts at the house and works its way outward to the surrounding fuel beds.

It starts with the Fire Hazard Reduction Program - clearing weeds and brush 100 feet away from the structure as a standard and then moving to the natural vegetation beyond that point. It is not unreasonable, and in some instances, may be encouraged for property owners to clear up to 300 feet away from structures depending on topography and environmental conditions. When community fire breaks, vegetation removal or modification is necessary, it may be accomplished in several ways. Techniques include the use of hand crews, mechanized equipment, hand tools, grazing, forage crop propagation, herbicides, and prescribed burning. Vegetation management projects are often accomplished using a combination of these techniques.



Regardless of the techniques used, the nature of the vegetation in Ventura County assures that, unlike the forests in northern areas, the chaparral prevalent here will quickly grow back. As a result, in addition to the treatments themselves, successful vegetation management projects include planning, oversight, and an ongoing maintenance process.

Proper planning of vegetation management projects includes careful consideration of all environmental, cultural, habitat, and historical preservation aspects. Each of these areas needs to be addressed, therefore review, permission, approvals, as well as permits that may be required, are essential before any work is done on the ground. This process is evaluated on a project-by-project basis, taking into consideration the project's activities, geographic location, and seasonal timeline.

Wildfire Safety Project Priorities



While any wildfire protection project is important, the realities of funding constraints require priorities to be established among types of projects. Given the information within this document that is specific to Ventura County, the types of projects that are determined to be of highest priority, in priority order, are:

1. Vegetation management projects where the potential for a wildfire threatens life, property, agricultural assets, critical infrastructure, evacuation routes, and/or emergency ingress/egress in and around the communities at risk and unincorporated areas of the county.
2. Vegetation management projects where the potential for a wildfire threatens watersheds, riparian areas, or other sensitive ecosystems; or high-traffic recreation areas.
3. Wildfire Safety Education Programs that provide homeowners, farmers, ranchers and other community members with information on defensible space, fire-resistant landscaping, emergency procedures, evacuation, temporary safety areas, home defense, and related topics; and planning or preparedness projects that improve citizen and/or firefighter safety in the event of a wildfire.

Fire Hazard Reduction Program

The Fire Hazard Reduction Program is one of the most important fire prevention programs offered by the Ventura County Fire Department. The program provides an opportunity to establish defensive barriers in the urban/wildland interface in preparation for the annual onslaught of wildfires in the county.

The objectives of the Fire Hazard Reduction Program are to:

- Reduce the negative impacts to life, property, and infrastructure from destructive fires in the Wildland Urban Interface areas.
- Provide fire suppression resources the opportunity to successfully protect structures and other valuable properties in the Wildland Urban Interface by establishing and maintaining a minimum 100-foot defensible perimeter around each structure.
- Work with property owners, local jurisdictions, and other District programs to create an acceptable defensive perimeter around urbanized areas of the Fire District.
- Protect the watershed fire areas from exposure to structure fires in the Wildland Urban Interface areas.
- Support the public's need for clear and accurate information regarding Defensible Space and the District's Wildland Fire Hazard Reduction Program requirements.
- Leverage technology to reduce expenses of the FHRP program, to provide ease of access to the public, and to document how FHRP program activities and resulting proper defensible space can be correlated with reduced loss of life and property due to wildland fires.

The response area for the Department includes seven incorporated cities, many rural communities, and vast areas of open agricultural or undeveloped land. Over time, as the population of Ventura County has grown and development expanded to accommodate that growth, the risk from wildfire has increased.

The County of Ventura had a County Ordinance in 1929 and 1930 that required a 30-foot brush clearance area around all structures. In 1950, the distance was increased to 60 feet. The more formal Fire Hazard Reduction Program began in 1965 when the Ventura County Fire Department adopted the Uniform Fire Code for the first time. The code was compiled and produced by the California Fire Chiefs Association.

Prior to 1965, the Department's fire code was only about 15 pages long, and the only code enforcement was a citation from the courts. Under the old fire code, 1,431 clean-up notices were issued in 1958. If needed, a second notice was issued called a "Fire Code Violation." After that, the Department seldom took any further action. All notices were done by hand.

Owners were located by asking neighbors if they knew who owned the land parcel in question. Parcel maps were not available at the fire station.

But with the adoption of the fire code in 1965 and the use of Electronic Data Processing as a means of notifying property owners of fire hazards existing on their property, the program began to be much more effective. This system provided the fire stations with the names and addresses of property owners and parcel maps were also available.

Under the provisions of the fire code, failure to comply with an abatement notice resulted in the Fire Department removing the hazard with the cost of the removal, plus an administrative charge, being assessed against the property.

Records show that in 1965, 5,000 notices were sent out and the program had a \$10.00 administrative charge for each parcel cleaned by the Department.



By about 1970, a tremendous amount of development in the Simi and Conejo Valleys resulted in the Department sending out over 11,000 notices and hiring contractors to clean more than 2,000 parcels each year, all with the additional administrative charge of \$10.00.

In 1971, the brush clearance phase of the weed abatement program was expanded, with a focus on improved properties in high-hazard areas, to emphasize a 100-foot area of defensible space. This was done in response to the significant losses that occurred in 1970 as a result of devastating brush fires in Ventura County. The formal clearance requirement from 60 feet to 100 feet did not change by ordinance until 1991.

By 1983, the administrative charge had been increased to \$41.00 per parcel. Fourteen thousand notices were sent out and 1,340 parcels had to be cleaned by the Department.

The program changed its name in about 1990, from Weed Abatement to the Fire Hazard Reduction Program and the urban/wildland interface conflagrations were termed “the fires of the future.”

During the 1990s, the administrative fee charged by the Department began to rise steadily. In 1991 it was increased to \$221, and by 1996, it had risen to \$690. For 2022, the charge is \$1,785 per parcel.

Over the years, the number of parcels the Department has had to abate has been greatly reduced by a concentrated effort from the fire inspectors assigned to the program and the increases to the administrative charge. In 2007, the Department abated only 18 parcels, down from a high of 2,000 in 1971. The current average is approximately 25 - 30 parcels abated per year. In 2021, a record low of 5 parcels were abated by the Fire Department contractor

The statistics over the past 25 years show two unmistakable trends; first, voluntary compliance by the property owners is extremely good thanks to the efforts of the fire inspectors and, secondly, the compliance continues to improve even with many more notices being sent on a yearly basis. In 1971, the Department abated about 18 percent of the noticed properties, compared with less than one percent in 2007, despite an increase of more than 75 percent in the number of notices sent over the same period.

The Fire Hazard Reduction Program is operated out of the Fire Prevention Bureau. It is led by a Fire Prevention Officer and staffed by a full-time Senior Fire Inspector and a Fire Inspector. Starting in May and extending until about August, six - eight seasonal workers assist in inspections and compliance.

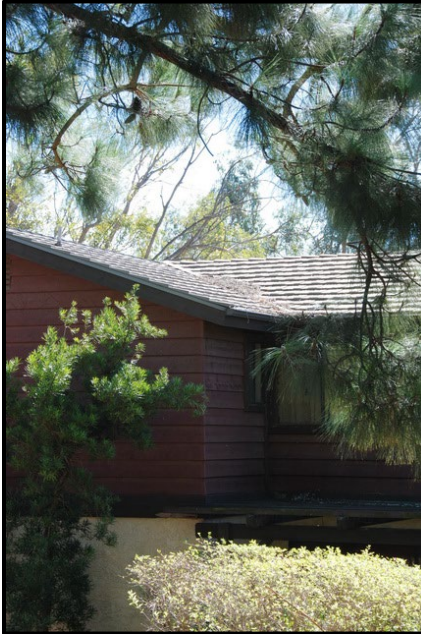
Landscape (Ornamental)

- Remove continuous flammable vegetation and other combustible growth within 100 feet of any structure. Single trees or shrubs or cultivated ground covers may be permitted provided they are maintained so that they do not readily transmit fire from native vegetation to the structure.



- Special attention should be given to the use and maintenance of ornamental plants known or thought to be high-hazard combustible plants when used near structures.

Some of these known plants are, but not limited to, acacia, cedar, cypress, eucalyptus, juniper, pine, and pampas grass. Planting of ornamentals should be properly maintained and should not be planted in mass plantings and groups. They should not be planted in such a manner that they could transmit fire from the native brush to the structure.



Yard Maintenance

- Stack wood at least 30 feet from structures; remove flammable vegetation within 10 feet of a woodpile.
- Remove all stacks of construction materials, pine needles, leaves, and debris.
- Locate fixed butane/propane tanks at least 10 feet from any structure and give them 10 feet of brush clearance.

Roof Maintenance

- Remove branches overhanging the roof. A minimum 3-foot clearance above the roof is required.
- Provide a minimum 10-foot clearance from chimney and stovepipe outlets.
- Clean all dead leaves from the roof, roof valleys, and rain gutters.
- Cover chimney outlets with a spark arrestor consisting of a metal or non-flammable screen of ½ inch or smaller.

SECTION V: PRE- FIRE MANAGEMENT TACTICS

VEGETATION MANAGEMENT AND FIRE BEHAVIOR MODIFICATION

The Ventura County Fire Department's Vegetation Management Program focuses on vegetation that is beyond the scope of the Fire Hazard Reduction Program.

Fire behavior modification zones and community fire breaks are useful assets in and around the Wildland Urban Interface. These zones utilize the science of behavior modeling to predict the anticipated fire behavior in each area. Adding historical fire and weather data, the Department evaluates the areas to reduce the effects of fire to the assets at risk. Fire behavior modification zones provide areas with reduced fuel loading, altered fuel continuity, and modified fuel configuration that is intended to alter fire behavior.

Positive changes to fire behavior increase firefighter safety during wildland operations by reducing the energy released in the treated fuel bed. Similar projects can be used to construct designated safety zones or temporary refuge areas.

The Department works cooperatively and collaboratively with landowners, environmental organizations, and land management organizations to restore ecosystems and effectively manage the open-space areas within the county while providing fire protection to our communities at risk.

Fast-moving, high-intensity wildfires contribute to the destruction of habitat and prolong the restoration period associated with wildfires. Vegetation management reduces secondary fire effects by limiting fire intensity. In addition, the Department works with state and federal resource agencies, and the Ventura County Watershed District, to maintain and preserve valuable resources in the watershed areas.



DIVISION/BATTALION/PROGRAM PLANS

The Five-Year Vegetation Management Plan of the Ventura County Fire Department (commonly referred to as the Five-Year Burn Plan) was developed as a planning tool to assist in the overall strategic objective of modifying hazardous fuels within the county. Because vegetation management planning is dynamic by nature, this plan is intended to be a living document subject to changes caused by many variables. These variables include, but are not limited to, a change in fuels due to natural fires, residential and commercial development into the interface areas, special governmental funding programs for hazardous fuels reduction, and continued participation by public and private landowners.

Six prescribed fire benefits, as defined by CAL FIRE's Vegetation Management Program, were evaluated to prioritize specific projects. These benefits are fire hazard reduction, water yield, wildlife habitat improvement, fisheries habitat improvement, air quality improvement, and range forage improvement.

Based on analysis of fire benefits, projects in each identified area are prioritized as high, medium, or low. Projects having benefits other than fire hazard reduction are rated as either a medium or low priority based on the value of the other derived benefits. All our projects have a maintenance component to keep the threat reduced.

Casitas, Ojai, Ventura, Fillmore, South Mountain, Thousand Oaks, Malibu, Oak Ridge, Simi Valley, and Piru are the ten fuel beds that are identified and serve as the geographical basis from which the plan was developed. These areas are found in four of the Unit's five battalions and represent most of the Department's at-risk areas. Fire history from the past 100 years, assets at risk, fuel types, and weather patterns were all considered in the development of this plan.

APPENDIX A: PRE-FIRE PROJECTS

Project Number	Project Name	Planning Area	Status	Activity Acres	Project Acres
3013-1975-PRE-029	FHRP Defensible Space Inspection	SRA, LRA	A	County wide	
3013-2013-FPL-028	FHRP Road Clearance	SRA, LRA	A	50	50
3013-2014-PRE-027	Wildland Fire Mitigation & Education Outreach	SRA, LRA	A	County wide	N/A
3013-2014-FPL-026	Neighborhood Chipper Program	SRA, LRA	C	County wide	100
3013-2011-FPL-013	Ag ID Cards	SRA, LRA	A	County wide	N/A
3013-2013-FPL-000	Helispots	SRA	M	100	155
3013-2009-VMP-032	Hopper Mountain Condor Refuge	FRA	M	19	19
3013-2008-FPL-025	Ojai Last Defense (CDZ)	SRA/ LRA/ FRA	M	40	40
3013-2008-VMP-030	KFA Project	LRA	M	5	73
3013-2011-VMP-001	Reagan Defensible Space	LRA	A	109	18
3013-2008-VMP-003	Upper Ojai Wildfire Protection Zone	SRA	A	25, 8	33
	Haley Project	SRA	P	TBD	
3013-2010-FPL-002	Matilija TRA	SRA	M	7	7

3013-2012- PRE-015	Central Ventura County Ready, Set, Go! Program	SRA, LRA	O	county wide	N/A
3013-1974-FPL- 024	Fire Roads	SRA	M	county wide	
3013-2014- OTH-018	Ranch Plans	SRA, LRA	O	county wide	N/A
3013-2010- VMP-035	Sespe	SRA	M	2.7	2.7
	Harmon Canyon	SRA	P	TBD	2,123
	Living with Fire: Building Resilience in Ventura County	LRA/ SRA	P		
	Coast Live Oak Mortality	SRA, LRA	P		1000+
3013-2009-FPL- 036	Grubb-Taylor Bridge	SRA	C	1.5	5
	Fire in the Classroom	LRA/ SRA	P	N/A	N/A
0313-2017-FPL- 003	Thermal Anomaly	SRA	A	13	13
0313-2019-FPL- 007	Ventura River Arundo Removal	LRA/ SRA	A	100	82
	Reducing Wildfire Risk in PIRU	SRA	P	TBD	
	Home Ignition Zone Training Bell Canyon	SRA	A	N/A	N/A
	East Winds Vegetation Management Project	SRA/ LRA	P	TBD	
	Community Wildfire Protection Plan Update	SRA/ LRA	A		

3013-2019-FPL-003	Forest Service Fire Roads	FRA	A	63	63
3013-2021-FPL-003	Ventura River Watershed Arundo Removal Project	SRA/LRA	P	TBD	
	Wildland Tactical Maps	LRA/SRA	A		
3013-2019-FPL-004	Ojai Valley Hazardous Fuels Reduction	SRA/LRA	A	43	43
3013-2008-FPL-025	Ojai CDZ (Ojai Last Defense)	FRA/SRA	A	80	40

Project Number: Cal MAPPER ID *Project Name:* Project Name as in Cal MAPPER

Planning Area: SRA (State Responsibility Area) LRA (Local Responsibility Area) FRA (Federal Responsibility Area)

Status: A = Active, P = Planning, C = Completed, M = Maintenance

APPENDIX B: UNIT GOALS AND OBJECTIVES



Goal: The primary goal of the Ventura County Fire Department's Strategic Fire Plan is to prevent the loss of life from wildfires, reduce the amount of property destroyed by them, and reduce the total cost of fighting wildfires. This is accomplished in Ventura County by protecting assets at risk through focused pre-fire management prescriptions and increased initial attack success. The Ventura County Fire Protection District supports the California Strategic Fire Plan and has modeled its Ventura County Unit Strategic Fire Plan as a complement to the State plan.

The Ventura County Unit Strategic Fire Plan has five strategic objectives:

1. To create wildfire protection programs and policies that reduce the risk to communities and create safer conditions for firefighters.
2. To assess all areas of natural vegetation that threaten values at risk, to determine strategies for reducing that risk.
3. To emphasize intensive and effective training for firefighters to improve their skills and increase their safety.
4. To develop and maintain strong programs for vegetation management and fire hazard reduction while protecting the environment and preserving habitats.
5. To develop and maintain comprehensive public education programs to inform, instruct, and enlighten residents on the dangers of wildfires and what they can do to prevent and prepare for them.

APPENDIX C: ADDITIONAL UNIT SPECIFIC GOALS AND OBJECTIVES

SUMMARY

For the California Strategic Fire Plan, the Ventura County Fire Department is responsible for wildland fire protection within Ventura County under policies set forth by its Board of Directors and its contractual obligations to the State.

The Ventura County Fire Department fulfills this mission by using innovative strategies to create an atmosphere where careful planning, comprehensive education, and highly trained firefighters result in well-protected communities. For the Ventura County Fire Department, the elements of effective protection are:

- ☐ Comprehensive Planning
- ☐ Ongoing Community Education
- ☐ Vigorous Prevention Efforts

Aggressive Fire Suppression coupled with the proper mix of the elements above, the values at risk within Ventura County can be effectively and economically protected from the risks of wildfire.

Comprehensive Planning includes such pre-fire actions as the construction of community fire breaks, hazardous fuel reduction, construction of refuge areas, and the creation of defensible space. These actions not only reduce the risk to valued assets, but they also enhance firefighter safety.



Community Education is a key component in creating safe and Firewise communities. There is no doubt that, even during a major wildfire, there are not enough fire engines to have one in every driveway. As a result, the Ventura County Fire Department believes it must establish a partnership with residents to educate them on how they can harden their homes, provide defensible space, and safely evacuate. This is accomplished through the use of the “Ready, Set, Go!” wildfire preparedness program, and the message is delivered by other means. All Ventura County fire stations have printed materials available, and all the firefighters are trained in the key message points.

VCFD personnel make regular presentations to service clubs, school groups, homeowners associations, civic organizations, and twice a month, at the County Courts jury assembly room. Working with Fire Safe Councils and other interested collaborators, the Ventura County Fire Department reaches a wide range of affected property owners.

The Department also employs websites (<http://vcfd.org/> <http://vcreadyssetgo.org>), social media (Facebook and Twitter), mobile apps, and other available technology to help educate and inform the public.

Many of the Ventura County Fire Department’s fire prevention efforts have become models for other fire departments. In particular, the Fire Hazard Reduction Program (FHRP), with a 50-year record of success, has been widely adopted in other jurisdictions.

Under this program, abatement notices are sent to more than 18,000 property owners in the Wildland Urban Interface. The code requires these property owners to clear weeds and brush 100 feet from any structure. This removes dangerous fuels in proximity to structures and it provides defensible space for firefighters to use. The Department performs the work on parcels that do not complete the abatement by the deadline and the property owner is assessed the cost. But, due to the historical success of the program, there is a 99 percent voluntary compliance rate.

Despite concerted education and prevention efforts, the Ventura County Fire Department understands that wildfires will occur. It has a stated goal of keeping 95 percent of these fires at less than 10 acres. Its commitment to training and equipment has resulted in achieving this goal on a regular basis. The Ventura County Fire Department's firefighters are some of the best-trained firefighters in the world, and their expertise shows not only in the results in Ventura County but also through their contributions in other jurisdictions as well.

Because of this, the Ventura County Fire Department and its Strategic Fire Plan are a strong component of the California Strategic Fire Plan and the State's overall firefighting effort.

APPENDIX D

Fire Safe Councils / Contacts

In order to fulfill their common mission to preserve Ventura County's manmade and natural resources, Fire Safe Councils utilize the combined expertise, resources, and distribution channels of their members.

Ojai Fire Safe Council
Chris Danch, Executive Director
1330 Foothill Rd. Ojai, CA 93023
Office: (805) 646-7307
<https://firesafeojai.org/>

Ventura Regional, formerly Central Ventura County Fire Safe Council
Elaine Himelfarb, Executive Director
(805) 746-7365
<http://cvcfiresafe.org/aboutus.html>

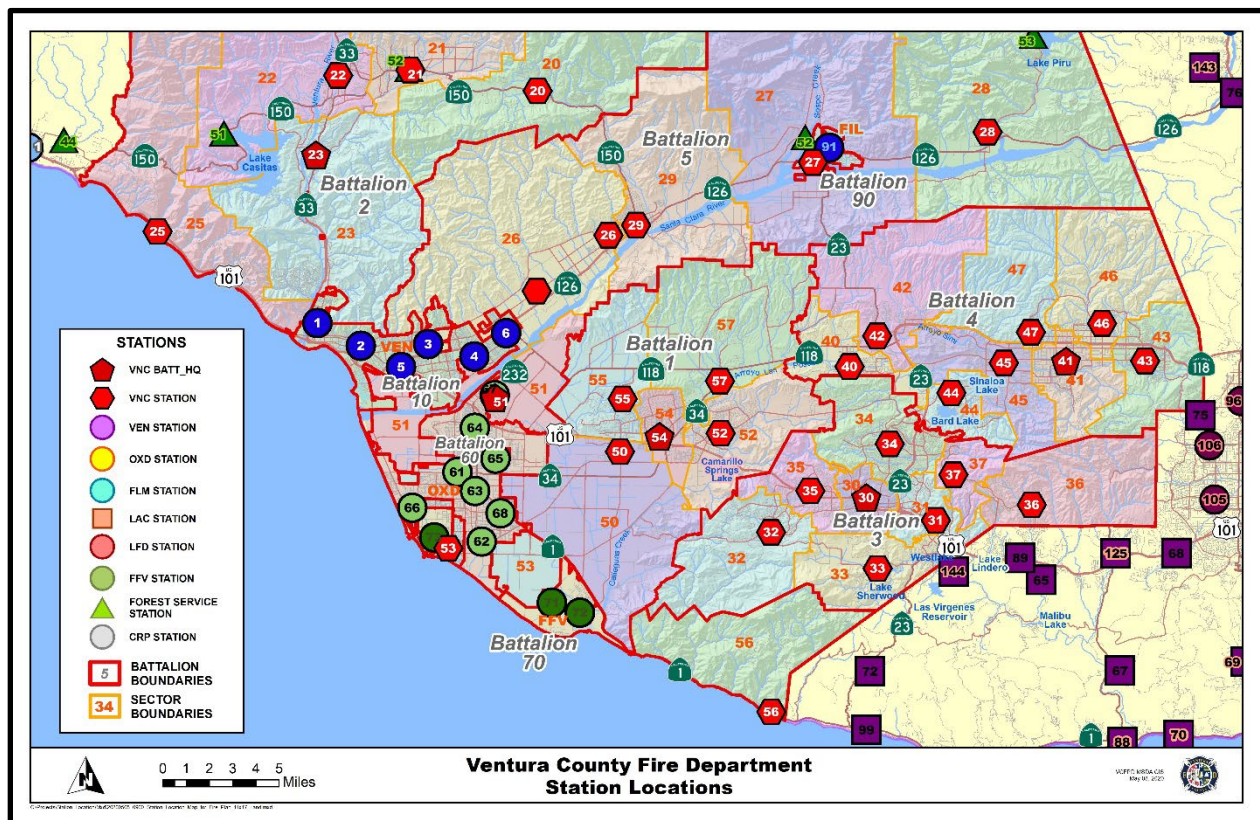
Ventu Park Fire Safe Council
John Allday
<https://www.vpfs.org/>

Oak Park Fire Safe Council
Doug Wilson
oakparkdoug@yahoo.com

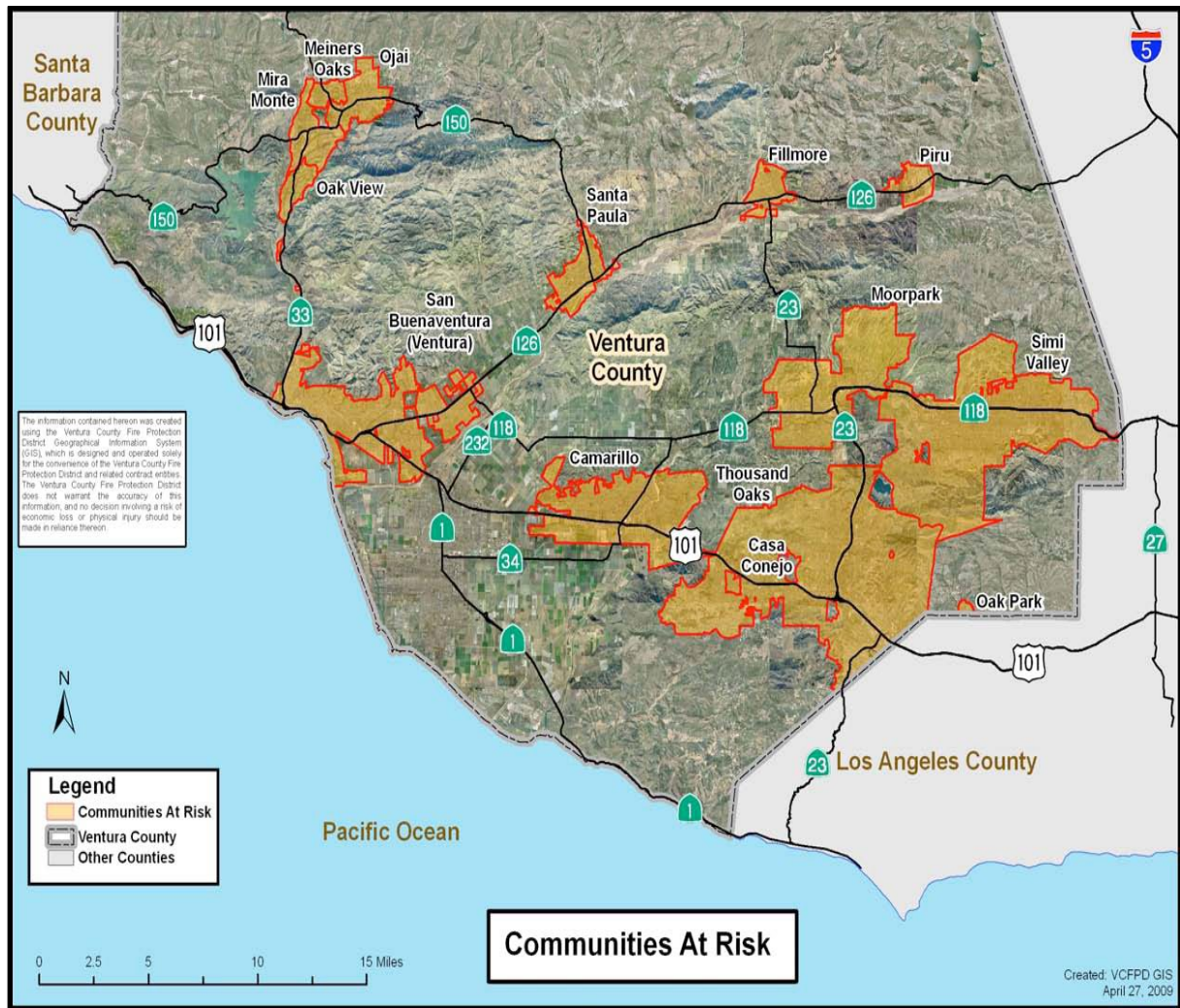
Newly formed in 2020-Bell Canyon Fire Safe Council
Greg McHugh
<https://www.bellcanyon.com/bcfsc>

Mt. Pinos Communities Fire Safe Council
Disbanded in 2017.

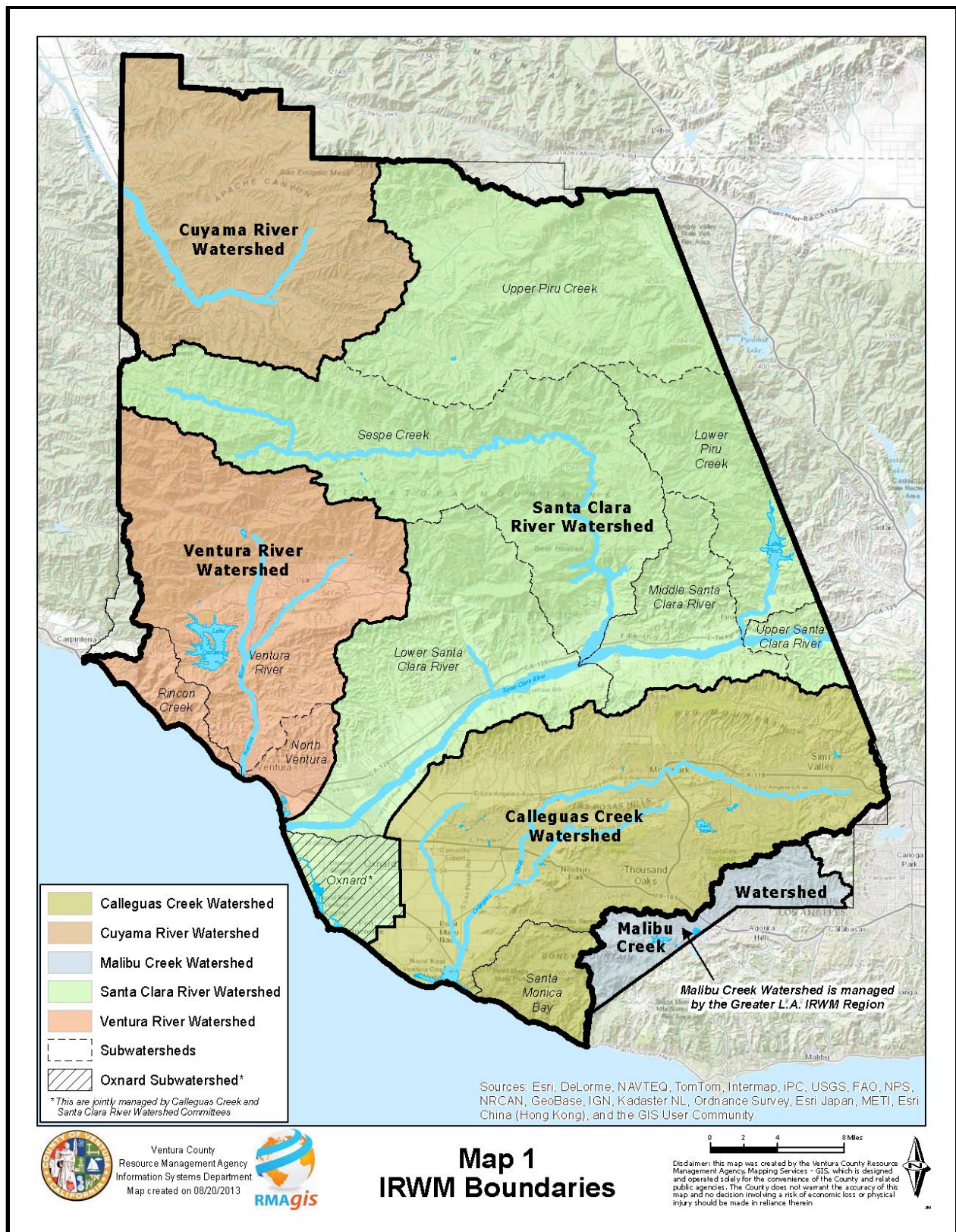
EXHIBITS: MAPS



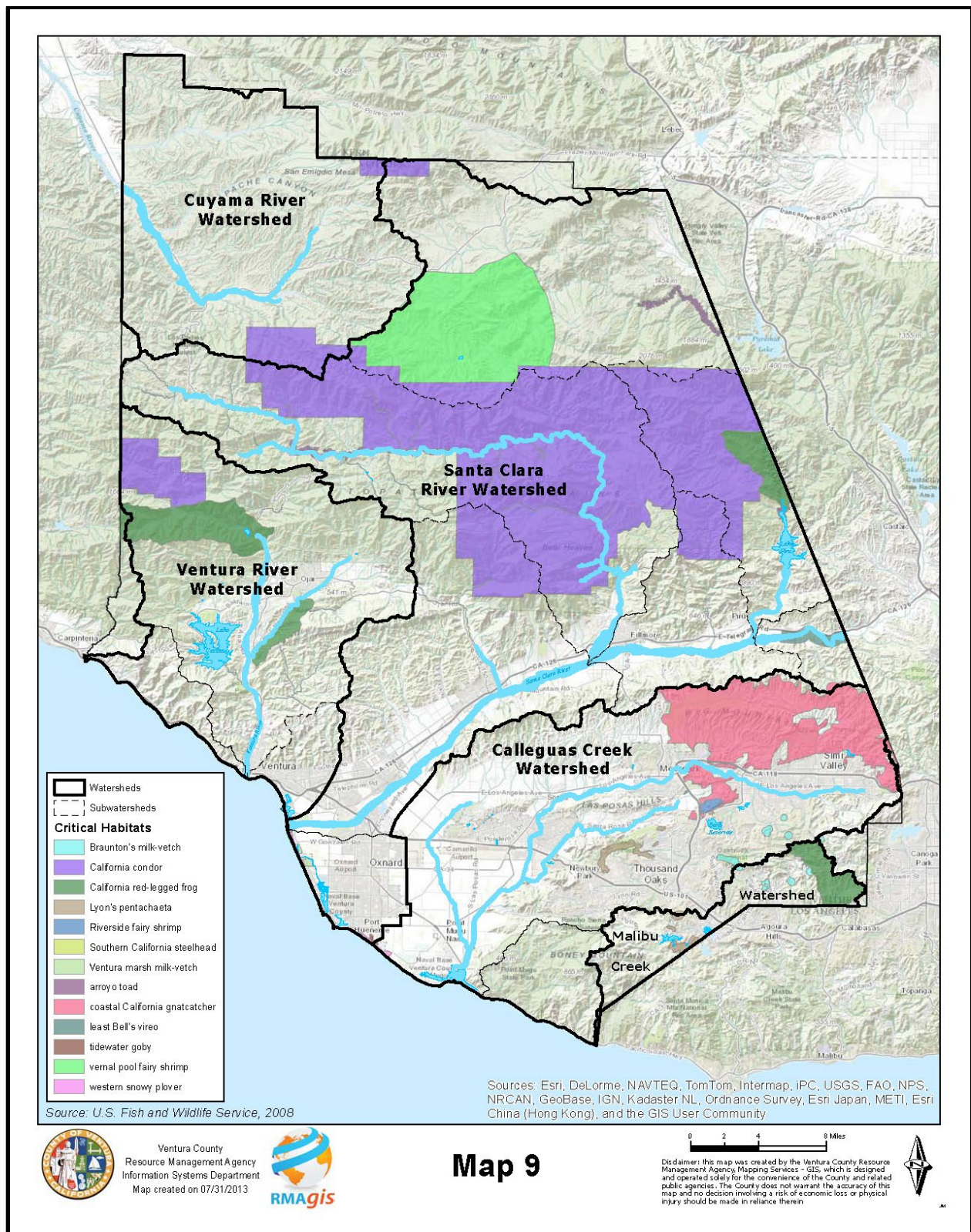
Ventura County Fire Station Map 1



Ventura County Communities at Risk 1



Ventura County Watershed Map 1



Ventura County Watershed Map 2 1

ANNUAL ACCOMPLISHMENTS REPORTING (2022)

Like the rest of the world Covid-19 has had a large impact on the Ventura County Fire Department. To minimize the impact on VCFD personnel and the communities we serve, the department took quick and decisive action by standing up a COVID Unit in early December 2020. Although much has changed since the Covid Pandemic started, a smaller Covid Unit is still in place as not as much staff is needed at this time.

VCFD will continue to monitor and support COVID-19 recommendations from Ventura County Public Health, the California Department of Public Health, and the Centers for Disease Control and Prevention (CDC). With Ventura County entering the Orange Tier, as of April 08, 2021, the Ventura County Fire Department has resumed in-person services at 165 Durley Avenue Headquarters in Camarillo.

Fire Planning:

- To provide adequate space for modern firefighting equipment a new Fire Station (Station 27) was completed in Fillmore. During normal operations, Station 27 is staffed by five firefighters and two heavy equipment crewmembers. The facilities equipment includes an engine, rescue, water tender, utility truck along with a bulldozer. The old Station 27 is being utilized by the Los Padres National Forest Type 3 engine and firefighters.
- In 2019 the Department purchased a portable, above-ground, closed system for the remote storage of firefighting water. The Helopod™ is 20' long with a 7,000-gallon capacity, smooth-sided allowing for helicopters to extract water safely using a fixed tank with a snorkel or a collapsible bucket. This asset will be strategically placed, allowing quicker turnaround times by placing the water where the helicopters can use it to help extinguish fires.
- Progress continued this year on a mobile Wildland Pre-Fire Plan application. The application is an integral part of the Ventura Situation Awareness Tool (VSAT), a web-based geospatial decision support mechanism intended to allow users to create and share information across an incident and with other organizations. The "VSAT Wildland Pre-Plan View state" is a version of the VSAT interface designed to browse and update pre-planning data before the incident. New templates were created for ground "truthing" and tactical information updating by field personnel. As fire stations submit local pre-fire plan data, the information is made available both internally and externally through VSAT and as printable PDF maps.
- The Department continued to work with the Ventura Regional Fire Safe Council (VRFSC), formerly the Central Ventura County Fire Safe Council (CVCFS) on updating ranch plans which provide quick accurate situational awareness to firefighters. Over two dozen ranch owners have now taken advantage of this valuable program. We will continue to work with VRFSC in 2021 on the database schema and on insuring consistent symbology in the geospatial data.

- VCFD personnel are active participants on the Invasive Weeds Task Force, this group seeks to remove Arundo-donax an invasive giant reed that takes over riparian habitats and greatly increases the severity and occurrences of wildfire in these areas.
- The Department continues to work with Ventura Regional FSC on the Ag Pass Program which provides identification cards allowing essential personnel to gain passage through areas of disaster-restricted access. Public safety and other emergency workers allow discretionary access to workers in possession of the cards so that outbuildings, livestock, crops, and other assets can be protected.
- iPads were deployed to engine companies that contributed to efforts by our GIS cadre to create specialized map products for offline use and to provide inputs to other applications utilizing geospatial data. In 2021 an FHRP Mobile iPad App was utilized, allowing for increased efficiency in conducting and recording FHRP inspections, including reporting to CALFIRE.
- Our partnership with Intterra (VSAT) continues with work on streamlining and simplifying the user interface and adding functionality.
- Ventura County Fire Department is an active partner with the University of California Cooperative Extension and the Agriculture Commission working to identify and mitigate threats from invasive species such as the Polyphagous Shot Hole Borer and Gold Spotted Oak Borer, which are a contributing cause to tree mortality.
- VCFD continuously seeks ways to increase fiscal and environmental responsibility. In support of this effort, the Department purchased two Pump-Pod trailer-mounted units designated Drafts Unit 1 and Drafts Unit 2. The Pump-Pods are a mobile platform used for recycling water during training evolutions. Although not as realistic as fire ground operations, the Pump-Pod drafts units do allow continuous water flow with very minimal waste for whatever length of time needed to perform the training evolutions.
- In an effort to increase wildland fire response capacity, VCFD has added a third wildland hand crew, Crew 13 will be housed at the old Santa Paula Station 26 until a permanent location is established.

Wildland Fire Prevention Engineering:

- Fire roads and helispots in the county are maintained annually to ensure adequate access and egress for firefighting resources. By providing improved access, incident mitigation is accomplished quickly and safely.
- Ventura County's FHRP ensures compliance with CA PRC 4291, GC 51182, and VCFC by conducting annual property inspections. In 2021, approximately 20,000 total inspections were conducted – 10,600 of those are in the SRA - which resulted in 1,007 detected violations. There were 5 non-compliant properties that required enforcement mitigation.
- In support of the FHRP, Ventura County Fire-dedicated GIS personnel maintained the Department's internal web page with layers for SRA and FHRP

data. On a weekly basis, a process was conducted to coordinate the FHRP database with the county's Assessor Parcel database.

- VCFD continuously seeks innovative ways to increase fiscal and environmental responsibility. In support of this effort, the Department purchased two Pump-Pod trailer-mounted units designated Drafts Unit 1 and Drafts Unit 2. The Pump-Pods are a mobile platform used for recycling water during training evolutions. Although not as realistic as fire ground operations, the Pump-Pod drafts units allow continuous water flow with very minimal waste for whatever length of time needed to perform the training evolutions.

Grant Awards 2021:

- City of Santa Paula received a CAL FIRE CCI GRANT for the project, City of Santa Paula Eucalyptus Fuel Removal Ventura. The goals are to reduce hazardous fuels in a low-income community around homes, critical infrastructure, and medical facility structures to create a strategic fuel break, increase vegetation community resiliency and control and manage invasive plant species while minimizing greenhouse gas emissions. We will reach these goals through a variety of treatments including fuel removal, pruning and limbing of trees, mastication, and invasive plants treatments to reduce chances of ignitions along roads, residential structures and critical infrastructure to create fuel breaks that will serve to change fire behavior and reduce the potential for fires which would displace hundreds of residents.
- Concerned Resource and Environmental Workers received a CAL FIRE CCI GRANT for the project, Ojai & Santa Paula Chipping, and Wildfire Education. The chipping and brush clearance program has incentivized homeowners to reduce fuel-centric vegetation within their property by offering much-needed support with clearance and disposal, thereby minimizing wildfire risk, and increasing defensibility. Biomass produced by the chipping program is repurposed locally as mulch for oak woodland restoration projects; this limits GHG emissions by eliminating hauling of the biomass to a processing facility (the closest of which is 30 miles from Ojai) and encourages carbon sequestration through soil regeneration and tree growth.
- Ventura County Resource Conservation District received a CAL FIRE CCI GRANT for their project, Ventura County Wildfire Collaborative (VC-WC) Project Ventura. Reducing fire hazards throughout the County leads to increased public safety, infrastructure protection, water conservation, air quality that remains unimpacted by smoke or ash, & avoidance of economic distress on impacted

communities. Climate resiliency will be increased on a range of land-use types, residential homes, to agricultural properties. Passive emission reductions through volunteer actions taken from home hardening recommendations is expected be achieved, rather than emissions being released during a wildfire. Optimizing escape routes and understanding traffic patterns in emergencies will allow for more efficient use of emergency vehicles, reducing excessive air pollution.

Education and Information:

- The Department continues to support wildland fire education and succession planning for their employees as well as outside agencies by offering many ICS/NIMS courses. VCFD supports large incident management by allowing Incident Management Team participation by uniformed personnel. Numerous personnel within the Wildland Division became certified in various ICS positions.
- The Department typically conducts eleven 17-hour CERT classes, certifying between 350 and 400 people each year. There is an annual refresher typically scheduled in the Fall. These events were postponed due to COVID-19.
- VCFD is committed to creating a safe and educated community one citizen at a time. Despite the COVID-19 pandemic, in 2020 115 volunteers were still able to log 1,500 hours and more than 66,000 residents were informed and educated on fire safety as well as disaster preparedness.
- During the curtailment of live events and trainings because of the pandemic, VCFD partnered with nonprofits and connected with more than 550 community service engagements, including food delivery and the distribution of bilingual safety information and education to over 16,000 local community members a week during a three-month period.
- The Iverson Staff Ride was completed by Ventura County Fire Department personnel in the winter of 2019/2020. The final product consists of five Stands (points on the terrain with a tactical significance during a fire) that are marked by cast bronze plaques set on a three-foot stainless-steel post. First, the plaques help guide individuals that are not familiar with the incident through a chronological narrative that leads to the final Stand and Cory Iverson's fatality site. Secondly, the plaques mark points of the Staff Ride where students will be able to put themselves in the shoes of decision makers on the incident so they may learn from the past. The Stands are connected by a beautiful trail that was constructed using purchased materials. Railroad ties line a significant stretch of the trail and were used in creating steps. A 20-foot walking bridge with handrails spans a difficult gulch and leads to Stand 4. A forty-foot retaining wall is set into the hillside at Stand 4, allowing a large flat spot, two benches, a steel cross, and a wide area of flagstone. The Iverson Staff Ride course material as well as the physical infrastructure were well-thought-out and planned for many years of educational possibilities.
- Three times per year, Wildland Unit crewmembers post 50+ signs throughout the county to remind residents of the FHRP deadline, Extreme Fire Danger, and the Ready, Set, Go! Program.

- The Ventura County Fire Department continued with its successful social media outreach which highlighted wildland fire-specific activities such as, live fuel moisture charts, red flag warnings, prevention, and training.
- 6 (Six) of our Fire Control Workers moved on to full-time, permanent firefighter positions with various agencies.
- Wildfire training is a foundational component that promotes safety and increases efficiency in the fire service. As ongoing support to the local colleges and neighboring fire departments, we provided wildland fire training for Oxnard City Fire Department, Ventura City Fire Department, Oxnard College, and Rio Hondo College.

Vegetation Management:

- Vegetation Management personnel routinely collected vegetation specimens to determine live fuel moisture percentages. This is one of many helpful tools used to identify the potential for significant fire activity in Ventura County.



- The Buenaventura I Vegetation Management Program - Prescribed Burn Plan had been in the planning phase for almost four years. The first VMP plan was approved by CAL FIRE in November 2013. The original 51,000-acre project area was redefined as the planning area and smaller project areas like the Buenaventura I VMP will be developed in the future. On December 6, 2013, the first burn was conducted. Due to long-term drought conditions, short-term fire weather conditions, and extended nesting seasons the prescribed burns were limited in acreage treated during 2016. Although the entire San Buenaventura 1 and 2 Vegetation Management Plans burned in the Thomas Fire, the plans will be kept open for maintenance.
- Ventura County Fire Department is partnering with the Ojai Valley Land Conservancy to eradicate invasive *Arundo-donax* from a portion of the Ventura River. The initial phase of the project will start in the fall of 2022. Removing this flammable invasive plant from the river will help return the area to a more natural riparian area that is more fire resistant to fast moving chaparral fires. Removing this invasive plant will also improve habitat for native flora and fauna, and water quality and quantity in the Ventura River that flows into the Pacific Ocean.
- The Ojai Valley Fire Safe Council has created a road map for the Ojai Valley Wildfire Risk Mitigation Strategy. This project is innovative, communitywide, and comprehensive. The project aims to reduce hazardous fuels around the Ojai valley, educate the community on home hardening and the home ember zone, increase capacity, and identify new evacuation centers, increase emergency water supply, and attain funding to support the project.

- Grazing with goats maintains an existing fuel break, Upper Ojai Wildfire Protection Zone (UOWPZ). The UOWPZ is 26 acres of private land that extends around the exposed sides of a community in the WUI (Wildland Urban Interface) adjacent to the Los Padres National Forest. This fuel break was credited with the protection of many structures during the Ranch Fire of 1999 that burned 4,400 acres.



- Each year the Ventura County Fire Department conducts a 20-acre fuel reduction project around the Ronald Reagan Presidential Library. This project complements the existing defensible space and provides enhanced protection from Santa Ana wind-driven fires. This fuel reduction project is accomplished through grazing by goats. Due to the large number of visitors to the library, this project gets a great deal of exposure and provides a platform to promote defensible space.
- One of the unique challenges the Department faces is the Sespe underground fire. Since 2007 a fire has been burning underground in a remote area of the county. The fire is located within the Sespe Condor Refuge and poses a direct threat to the condors as well as the biologists observing in the field. Each year the Department constructs control lines utilizing a dozer and crew to isolate fires that are ignited. The last fire to occur was on August 13, 2015, and due to the mitigations, the incident was quickly and safely controlled.

Ventura County Fire Department

PRE-FIRE PROJECTS

01/01/2021 thru 12/31/2022

Program	Project Name	Status	Acres	Miles
Fire Plan	Adams Canyon	Maintenance	7.9	
Fire Plan	Brome Ranch Road	Maintenance	23.61	
Fire Plan	Burson Ranch Fire Road	Maintenance	20.76	
Fire Plan	Fillmore East Fire Road	Active	87.98	4.98
Fire Plan	Fire Roads	Active	153.97	29.05
Fire Plan	Grimes Canyon	Maintenance	21.18	3.24
Fire Plan	Happy Camp	Maintenance	40.46	
Fire Plan	Helispots	Maintenance	60.29	0.42
Fire Plan	Lower Santa Clara River	Active	226.57	
Fire Plan	Middle Ridge Fire Road	Active	90.48	5.13
Fire Plan	Montgomery Fuel Break	Active	23.34	
Fire Plan	Ojai Valley Fuels Reduction	Complete	57.91	
Fire Plan	One Step Ahead: Chipping	Complete	36.12	
Fire Plan	Rancho Sespe Fire Road	Maintenance	67.96	7.05
Fire Plan	Reagan Defensible Space	Maintenance	80.72	
Fire Plan	Sespe	Active	2.68	
Fire Plan	Sulphur Mountain Road	Maintenance	29.72	
Fire Plan	Thermal Anomaly	Maintenance	16.88	
Fire Plan	Timber Canyon Fire Road	Maintenance		7.05
Fire Plan	Upper Ojai Grazing	Maintenance	63.39	
Fire Plan	Ventura River Arundo	Active	82.02	
Fire Plan	Ventura Watershed Arundo Removal	Planned	TBD	
		Totals	1,152.27	100.35

Volunteerism:

- Due to COVID-19 restrictions the Wildland Division's normal fundraising activities were put on hold except for the organization of the Banister Marathon.

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